ORIGINAL



BEFORE THE ARIZONA PUBLIC REGULATION COMMISSION

Chairman JAMES M. IRVIN Commissioner MARC SPITZER Commissioner	
IN THE MATTER OF U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996)) DOCKET NO. T-00000A-97-0238)))

WILLIAM A. MUNDELL

AFFIDAVIT OF STEPHEN L. KAIL ON BEHALF OF AT&T

REGARDING ANALYSIS OF QWEST PERFORMANCE DATA

PUBLIC VERSION

NOVEMBER 1, 2001

Arizona Corporation Commission DOCKETED

NOV 0 2 2001

DOCKETED BY	
	nse

TABLE OF CONTENTS

IN	TRO	DDUCTION AND QUALIFICATIONS	1
PU	JRP	OSE OF AFFIDAVIT	2
D	ΑТА	ANALYSIS PROCESS	4
SU	JMN	IARY OF RESULTS	6
I.	(CHECKLIST ITEM 1 - INTERCONNECTION	7
	A.	PRE-ORDER/ORDER PIDS	7
	1.	FIRM ORDER COMMITMENTS ("FOCS") ON TIME - PO-5	7
	B.	ORDERING/PROVISIONING PIDS	9
	1.	INSTALLATION COMMITMENTS MET - OP-3	9
	2.	INSTALLATION INTERVAL – OP-4	10
	3.	DELAYED DAYS IN INSTALLING SERVICE - OP-6	12
II.	(CHECKLIST ITEM 4 – UNBUNDLED LOCAL LOOP	13
	A.	PRE-ORDER/ORDER PIDS	13
	1.	FIRM ORDER COMMITMENTS ("FOCS")	13
	ON	TIME-PO-5	13
	B.	ORDERING AND PROVISIONING PIDS	16
	1.	INSTALLATION COMMITMENTS MET - OP-3	16
	2.	INSTALLATION INTERVAL – OP-4	18
	3.	DELAYED DAYS IN INSTALLING SERVICE - OP-6	19
	4.	COORDINATED CUTS ON TIME – UNBUNDLED LOOP – OP-13	20
	5.	MAINTENANCE AND REPAIR FOR UNBUNDLED LOOPS	21
C	ONC	LUSION	22

PUBLIC VERSION OF AFFIDAVIT OF STEPHEN L. KAIL REGARDING ANALYSIS OF QWEST PERFORMANCE DATA

AT&T Communications of the Mountain States, Inc. and AT&T Local Services on behalf of TCG Arizona ("AT&T") hereby submit this Affidavit of Stephen L. Kail regarding AT&T's Analysis of Qwest Performance Results before the Arizona Corporation Commission ("Commission").

INTRODUCTION AND QUALIFICATIONS

- I. My name is Stephen L. Kail. I am self-employed as a Telecommunications

 Consultant. I received an Associate of Science degree from Fort Dodge Junior College in 1966

 and a Bachelor of Science Degree in Mechanical Engineering from Iowa State University in

 1969. During the period of 1976-1980 I completed the majority of MBA program courses with a
 focus on finance and management. Subsequent to that time I completed over 20 technical,
 financial and management seminars, including topics on network switching and facilities

 management, federal and state telecommunications statutes and regulations, business operations,
 marketing and financial management. I have worked in the telecommunications industry for
 over thirty-two years.
- 2. Prior to becoming a consultant I was employed by AT&T or one of its subsidiaries in a variety of positions, including engineering design, contract management, engineering financial analysis, market management, strategic planning and pricing, methods and procedures, witnessing and regulatory team management. As a Telecommunications Consultant I have researched and prepared reports for several clients evaluating network orders, network performance, network maintenance and product market shares.

PURPOSE OF AFFIDAVIT

- 3. In this affidavit, I will present my analysis of data for several PIDs (Performance Indicator Definitions) as reported by Qwest in its Arizona Performance Results. Qwest, CLECs and other participants have developed and agreed on PIDs to measure Qwest's performance in attempting to satisfy 271 checklist requirements. The PIDs I have reviewed relate to the following checklist items:
 - a. Checklist Item 1 (Interconnection)
 - b. Checklist Item 4 (Unbundled Analog Loops

The Qwest Performance Results used in my analysis are the August 28, 2001 Qwest Performance Results for August 2000 - July 2001 for all CLECs and August 3, 2001 Qwest Performance Results for August 2000 - July 2001 for TCG.¹ I have then compared this data to AT&T's own internal data reflecting Qwest's performance.

- 4. The AT&T data that I have reviewed for purposes of my testimony has been collected in accordance with specific PIDs as defined in the AZ 271 Working PID Version 6.3. All data discussions herein will analyze a specific AZ 271 PID measure.
- 5. My Checklist Item 1 testimony focuses on an independent analysis of Interconnection Orders (LIS trunks) based on readily available AT&T data. I have focused my efforts on completing a thorough review of 51 of AT&T's LIS order summaries, key dates and associated logs and on making a complete and accurate analysis of the data. These

¹ Although Qwest made a filing on October 19, 2001 to include performance results for August of 2001, I have not yet completed my analysis for the latest month's data. I have confined the instant analysis to months currently being reconciled with Owest.

interconnection orders are part of The Liberty Group's reconciliation discussions with Qwest and AT&T.²

- 6. My Checklist Item 4 testimony focuses on an independent analysis of unbundled analog loops (UNE-Analog loops). UNE-Analog loops are an important part of Qwest's performance results data for AT&T and other CLECs. I have focused my efforts on completing a thorough review of 886 of AT&T's UNE-Analog loop order summaries, key dates and associated logs and on making a complete and accurate analysis of the data. In addition there is available AT&T trouble report information for UNE-Analog loops that I have evaluated. Several PIDs for pre-ordering/ordering and ordering/provisioning employ the same data collection and analysis processes for both UNE-Analog orders and LIS orders and the performance of these products is measured by identical PIDs and compared to respective performance standards. These interconnection orders are part of The Liberty Consulting Group's reconciliation discussions with Qwest and AT&T.
- 7. While I have confined my analysis to those checklist items where AT&T had its own Arizona-specific data, the problems I have uncovered may be readily applied to an analysis of other checklist items. In addition, there are other PIDS whose results calculations start with the same sets of input data underlying the PIDs I have evaluated and as a result, where a problem is identified for one PID, it may also affect other PID performance results. Finally the problems that I have found when evaluating AT&T's data and then comparing it with Qwest's AT&T data for both LIS and UNE-Analog loops are likely to apply to other CLECs as well.

²AT&T has agreed to participate in the reconciliation of data being conducted by Liberty Consulting Group and to reconcile its data with Qwest's in order to better understand the underlying basis for these differences and to help make this Commission's job easier. That effort is continuing. Both an order-by-order, date-by-date comparison and an investigation of orders identified in the review of AT&T's internal documents but not visibly reflected in Qwest's performance results remains to be done. Until that effort is completed, any discrepancies in data should be resolved in favor of AT&T and against Qwest.

DATA ANALYSIS PROCESS

- 8. My approach to completing an independent analysis of Qwest's Arizona performance results was multi-staged. I first researched AT&T's sources of interconnection order information, UNE-analog order information and maintenance and repair (Trouble Ticket) information. After the sources were identified and the information was collected, I developed a broad-based summary of the key data for each order and trouble ticket. I then used the summary information and the current Performance Indicator Definitions to formulate an approach that would independently match Qwest's performance results with the AT&T data that I had collected. I have compared my AT&T results to Qwest's results as presented in its reports, presenting my results both on a single chart and on a single table of data along with Qwest's performance analysis, matching the performance results report format as much as possible. In most instances, I was unable to fully match AT&T's own data with Qwest's AT&T data. The following paragraphs provide additional information on each step of my data analysis.
- 9. My research of AT&T's information sources included interviews of AT&T managers who issue orders and process trouble tickets and interviews of AT&T managers who use the same information I was seeking as part of their job assignments. I identified three systems that contained the information I was seeking: AT&T's ASR system (the former TCG's ASR system) containing summary and other tracking information on every order, AT&T's QPS system (the former TCG QPS system) that tracked final testing of orders and contained the best printable format of the order logs and AT&T's (formerly TCG's) TMTS system, which maintained a record of trouble tickets that were opened by AT&T and provided to Qwest to clear trouble within the network. I was briefed on the use of these systems so that I could collect the desired information.

- and key data was transcribed into an Excel spreadsheet. The key order data included identifying order numbers for both AT&T and Qwest, initial and supplemental order dates, FOC dates, FOC receipt dates, completion dates and key notes from the logs as the order was completed. The trouble ticket data collected included both the AT&T and Qwest trouble ticket numbers; the date, hour and minute a trouble ticket was opened and closed; and the key log notes defining the trouble and actions taken by Qwest to clear each identified trouble.
- 11. Using this data, I developed a series of comparison checks to minimize any data entry errors. Included in these checks were formats for dates that if typed incorrectly could be quickly found and corrected, and logic checks performed to find potential data collection errors, such as isolating FOC response and FOC dates that occurred before the order date. Once I had completed error checks and had double-checked for typos and entry errors, I was confident that the data fairly and accurately reflected the information for both the interconnection orders and trouble tickets. I then moved on to data analysis and comparison.
- 12. Using this common set of data for Arizona orders as the starting point, I matched the formulas contained in the PID definitions to the AT&T data that I had collected, by calculating PID equivalent results with the AT&T data. I was not involved in developing the PIDs, therefore, I consulted with John Finnegan of AT&T, who is directly involved in PID development and definition to be sure I correctly understood each PID, its input data and its output results. I further refined these calculation methods as a result of two Arizona PID and two Colorado PID reconciliation discussions held between Qwest and AT&T, and the continuing reconciliation of Nebraska data. I also continue to refine my approach based on information from The Liberty Group's reconciliation effort. Finally, I matched the format of Qwest's

performance results table and the associated chart for each measure for which I was able to collect AT&T data. These results are included as attachments to this affidavit.

13. Where I had no AT&T data that would allow a complete matching of PIDs, I provided the best match I could and have sought to collect relevant facts from Qwest through discovery and through the current reconciliation being conducted by The Liberty Consulting Group that might provide additional information.

SUMMARY OF RESULTS

- 14. Based on AT&T's own data matched with Qwest's AT&T reported results, this affidavit provides evidence that Qwest has not yet proven that it satisfies Checklist Item 1 (Interconnection Services) or Checklist Item 4 (UNE-Analog Loops). Given the disparate differences in results between the two sets of AT&T data -- AT&T's own data and Qwest's AT&T reported results -- it becomes clear that at present it is impossible to determine Qwest's current performance for not only AT&T, but for all CLECs in the state of Arizona. This is Qwest's 271 case and it bears the burden of clearly proving its compliance to this Commission. Based on the current differences between AT&T's own data and Qwest's AT&T performance results, this Commission should determine that Qwest's performance results do not reliably measure its actual performance and that Qwest has not shown that it has met its obligations under Checklist Item 1 and Checklist Item 4.
- 15. The discrepancies in AT&T data for interconnection orders in Arizona exhibit the same characteristics as those already found during the preliminary reconciliation efforts conducted between Qwest and AT&T using one month of Arizona and Colorado LIS orders for two PID measures (PO-5 and OP-3), and in the more detailed reconciliation of Nebraska results. Both of these PIDs, and other PIDs measuring Checklist Item 1 performance for Arizona will be

discussed in the Checklist Item 1 section of this affidavit. At present, AT&T's Arizona order details have not been fully reconciled between Qwest and AT&T.

16. In addition to interconnection PIDs, for the months of April 2001 through June 2001, AT&T's own data has been collected, and performance results calculated and compared to Qwest's reported performance results for several UNE PIDs. Data infirmities found in the comparisons of LIS Interconnection performance are also being found in the comparisons of UNE-Analog loop performance.

I. <u>CHECKLIST ITEM 1 - INTERCONNECTION</u>

and three Ordering/Provisioning PID results for Interconnection (LIS) trunks. The Pre-Order/Order PID I analyzed was PO-5 (Firm Order Commitments) and the Ordering/Provisioning PIDs were OP-3 (Installation Commitments Met), OP-4 (Installation Interval), and OP-6 (Delayed Days in Installing Service). Because AT&T had its own data for five of these measures, my analysis for PIDs PO-5, OP-3, OP-4, and OP-6 analyzed both Qwest's results and AT&T's internal results for the months of January 2001 through June 2001.

A. PRE-ORDER/ORDER PIDS

1. FIRM ORDER COMMITMENTS ("FOCS") ON TIME - PO-5

18. Pre-Order/Order PID PO-5 measures, on a monthly basis, the timeliness of Firm Order Confirmations (FOCs) returned to CLECs in response to LSRs/ASRs received from CLECs. Pre-Order/Order PID PO-5D measures, on a monthly basis, the percent of FOCs received on time in response to ASRs requesting LIS Trunks. A copy of the AZ PID for PO-5,

attached as **Exhibit 1**, provides the complete definition and the formula for the calculation of this performance measure.

- 20. The most troubling aspect of the analysis of PO-5 is that Qwest identified a different count of FOC responses than did AT&T and Qwest's results show better performance than the AT&T order logs show. If the same kind of order count and performance differences exist between all CLEC records and the Qwest records as exists between Qwest's and AT&T's records, then performance results as reported by Qwest for Arizona may be inaccurate.

³ Eligible orders are those orders remaining after orders identified as exclusions as defined by the applicable PID are removed. Exclusions may include orders such as those with missing or incorrect dates, orders with non-standard installation intervals, and delays due to CLECs rather than Qwest.

B. ORDERING/PROVISIONING PIDS

1. INSTALLATION COMMITMENTS MET - OP-3

- 21. Ordering/Provisioning PID OP-3 evaluates, on a monthly basis, the extent to which Qwest installs services for customers by the scheduled due date. The measure is stated as a percentage of orders completed on or before the original scheduled due date as assigned by Qwest. A copy of the AZ 271 OP-3 PID, attached as **Exhibit 3**, provides the complete definition and formula for calculating this performance measure. OP-3D and OP-3E for LIS trunks are part of Checklist Item 1 performance measures. The standard for performance is set forth in the PID, **Exhibit 3**, and is "Parity with Feature Group D (Aggregate)".
- 22. Attached as **Exhibit 4** is a comparison of AT&T interconnection order data to Qwest's CLEC specific AT&T data for LIS trunk Installation Commitments Met. Information to differentiate AT&T interconnection orders between OP-3D and OP-3E (Interval Zone 1 and Interval Zone 2)⁴ respectively was not available, so the two Qwest performance measures were combined for comparison purposes. I believe no degradation of the data or the related analyses occur as a result of the combining of these two performance measures.
- 23. In Exhibit 4 AT&T's internal data shows that Qwest is not doing as well in meeting installation commitments as Qwest represents in its AT&T data presented in the performance results report. AT&T's data also shows that Qwest's installation commitment performance was not nearly as good as its retail performance (FGD trunks). For January through March, AT&T records show [Confidential: XX%, XXX% and XX%], respectively, of installation commitments met. This performance falls to [X%] in the months of April and May. Qwest's data, on the other hands, shows [Confidential: XXX%] commitments met in all months

except for April where Qwest shows one installation commitment missed. Qwest's overall performance result for the 6 months of January-June is reported as [Confidential: XXXX%] while AT&T's records show [Confidential: XXXX%] for that period of time.

24. There are [Confidential: XXX% (XX)] more orders in AT&T's records used to calculate the measurement than reported in Qwest's results calculations. Again, the missing data in Qwest's results is the most troubling aspect of the comparative analysis. Qwest includes a total of 396 CLEC orders in its analysis of all CLECs (Qwest Performance Results Pages 57 & 62 of 254). If the same disparity exists between all other CLECs' records and the related Qwest records, as exists between AT&T and Qwest records, then there may be an additional 891 orders not included in Qwest's performance data (based on the same proportion of AT&T to Qwest orders identified as measurable). If these additional orders should appropriately be included in the performance results calculations, and the change mirrors the results produced with AT&T's own data, the total CLEC results may be much worse than reported by Qwest. These exclusions by Qwest most likely occur because the jeopardies identified by Qwest's technicians, who then form the basis for determining whether orders are "excluded" from a performance report, are not being appropriately categorized. To be perfectly clear, this is a "data input" concern, not a "processing of data for performance results" concern.⁵

2. INSTALLATION INTERVAL – OP-4

25. Ordering and Provisioning PID OP-4 evaluates, on a monthly basis, the timeliness of Qwest's installation of services for customers, focusing on the average time to install service.

The measure is stated as the number of average business days it took to install the orders

⁴ Zone 1 is Qwest's metropolitan area and Zone 2 is Qwest's rural area.

⁵ Liberty has checked the <u>processes</u> for calculating performance measures but had no comparable CLEC data to use in checking the accuracy of dates being input or the validity of exclusions.

completed during the month. A copy of the AZ 271 OP-4 PID, included as **Exhibit 5**, provides the complete definition and formula for calculating this performance measure. OP-4D and OP-4E (Interval Zone 1 and Interval Zone 2) for LIS trunks are part of Checklist Item 1 performance measures. **Exhibit 5** shows that the standard to measure LIS OP-4D and OP-4E performance against is "Parity with Feature Group D (Aggregate)".

- 26. Attached as **Exhibit 6** is a comparison of AT&T interconnection order data to Qwest's CLEC specific AT&T data for LIS trunk Installation Intervals. Information to differentiate AT&T interconnection orders between OP-4D and OP-4E (Interval Zone 1 and Interval Zone 2 respectively) was not available, so both Qwest performance measures were combined for comparison purposes. I believe no degradation of the data or the related analysis occurs as a result of the combining of these two performance measures.
- 27. OP-3 and OP-4 use the same universe of LIS orders as the starting point for assessing performance. I started my analysis for these two measures with a universe of 51 orders. From that universe I identified [Confidential: XX] AT&T LIS orders eligible for review and use in determining OP-4 performance. Qwest presented performance results on only 6 of the AT&T identified eligible LIS orders [Confidential: XX% of the XX] total AT&T identified orders. While the AT&T data shows a range of monthly average Installation intervals from a low of [Confidential: XXXX] days to a high of [Confidential: XXXX] days, Qwest's analysis shows a much wider range, from a low of [Confidential: XXXX] days for one month to a high of [Confidential: XXXX] days for another month (both of these were single order months). AT&T's composite average for the period shows a delay of [Confidential: XXXX] days while Qwest's shows an [Confidential: XXXX] days delay. The composite results are surprisingly close considering that the universes of orders vary so much between AT&T's own data and

Qwest's reported data. These results clearly show a data disparity problem that again calls into question the accuracy of Qwest's results. When measuring performance against Qwest's retail FGD performance results, some months are better, some months are worse according to AT&T's data, while all months, except April, are better for CLECs, according to Qwest's results.

28. This problem of Qwest excluding more orders than seem appropriate under the PID definition is again more troubling if it exists for other CLECs' data as well, causing the accuracy of Qwest's performance results assessing the LIS installation intervals to remain questionable.

3. DELAYED DAYS IN INSTALLING SERVICE – OP-6

- 29. Ordering and Provisioning PID OP-6 evaluates the extent to which Qwest is late in installing services for customers, focusing on the average number of days that late orders are completed beyond the committed due date. A copy of the AZ 271 OP-6 PID, attached as **Exhibit 7**, provides the complete definition and formula for calculating this performance measure. OP-6-A-4 and OP-6-A-5 (Interval Zone 1 and Interval Zone 2) for LIS trunk orders delayed beyond the original due date due to non-facility reasons, and OP-6-B-4 and OP-6-B-5 (Interval Zone 1 and Interval Zone 2) for LIS trunk orders delayed beyond the original due date due to facility reasons, are part of Checklist Item 1 performance measures. **Exhibit 7** shows that the standard to measure OP-6-A-4, OP-6-A-5, OP-6-B-4 and OP-6-B-5 performance against is "Parity with Feature Group D (Aggregate)".
- 30. I have analyzed AT&T's own order data, and compared it to Qwest's performance results, in order to assess LIS trunk Delayed Days. Information to differentiate AT&T interconnection orders between OP-6-A-4 and OP-6-A-5 was not available, so both Qwest Interval Zone performance measures were combined for comparison purposes. Likewise,

information to differentiate AT&T interconnection orders between OP-6-B-4 and OP-6-B-5 was not available, so both Qwest Interval Zone performance measures were combined for comparison purposes. I believe no degradation of the data or the related analyses occurs as a result of the combining of these two performance measures.

31. AT&T LIS order data identified [Confidential: X] orders delayed for non-facility reasons while Qwest identified no AT&T orders for this performance measure during January through June 2001. The AT&T data reveals that during the six-month period AT&T experienced average delays of [Confidential: XXXX days] for non-facility reasons (Exhibit 8). One order was delayed [Confidential: XX to XX days] for facility reasons, depending on whether you rely on Qwest's data or AT&T's.

II. <u>CHECKLIST ITEM 4 – UNBUNDLED LOCAL LOOP</u>

32. For Checklist Item 4, unbundled analog loops (UNE-Analog loops), I analyzed one Pre-Order/Order PID result, four Ordering/Provisioning PID results and reviewed four Maintenance/Repair PID results. My analysis focuses on the months of April through June, 2001, with results presented in tabular form rather than chart form which allows better viewing of the data for the three months included in the analysis.

A. PRE-ORDER/ORDER PIDS

1. FIRM ORDER COMMITMENTS ("FOCS") ON TIME-PO-5

33. Pre-Order/Order PID PO-5 measures, on a monthly basis, the timeliness of Firm Order Confirmations (FOCs) returned to CLECs in response to LSRs/ASRs received from CLECs. Pre-Order/Order PID PO-5A-1(b) measures fully electronic LSRs received via IMA GUI, PO-5A-2(b) measures fully electronic LSRs received via IMA EDI, PO-5B-1(b) measures

electronic/manual LSRs received via IMA GUI, PO-5B-2(b) measures electronic/manual LSRs received via IMA GUI and PO-5C-(b) measures manual LSRs. All measures report, on a monthly basis, the percent of FOCs received on time in response to LSRs requesting Unbundled Analog Loops (UNE-Analog loops). As indicated earlier, a copy of the AZ PID for PO-5, attached as **Exhibit 1**, provides the complete definition and the formula for the calculation of this performance measure.

34. **Exhibit 1** shows that the standard for UNE-Analog performance requires that 95% of FOCs for PO-5A be returned within 20 minutes, 90% of FOCs for PO-5B be returned within 24 hours and 90% of FOCs for PO-5C be returned within 48 hours after receipt of the order. Even though these standards are different, they all are measured as a "percent met" and since virtually all AT&T orders for UNE analog are provided via IMA GUI (PO-5B-2(b)), I have combined all Qwest's AT&T results for comparison with AT&T data. Attached, as Exhibit 9 is a comparison of AT&T Arizona UNE analog data to Qwest's UNE analog AT&T data for FOC responses. Because I have combined PO-5A and PO-5B a results comparison is not meaningful, but the count of orders should match. In each month evaluated, however, the numerators and denominators⁶ for AT&T data do not match with Qwest's reported data. AT&T's own data compared with Qwest's data for April through June respectively for the denominators alone show [Confidential: XXX vs XXX orders in April; XXX vs XX orders in May; XXX vs XXX orders in June]. Here again, I believe that the primary cause for these differences is exclusions made to the respective data. Some exclusions may not be appropriate while others are appropriate.

⁶The numerator counts the number of FOCs returned on time. The denominator counts the total FOCs returned. The lower the numerator, the lower the performance.

- October 1 when I visited AT&T's offices and learned that AT&T had experienced difficulty in completing installations of loops from August 27 through September 6 as a result of Qwest systems problems. Because Qwest technicians could not access LNPSMS, a system used to verify number porting, during loop cuts Qwest was unable to concur on ports and thus the UNE-Analog loop orders had to be rescheduled via an AT&T order. The completion date was extended 5 additional business days, and for some orders additional 5-day supplements were necessary. As this problem continued, AT&T lost business as some of AT&T's new customers decided to cancel their orders rather than go through the hassle of multiple scheduling changes.
- 36. This problem alone was bad, yet it was compounded by at least one group of Qwest technicians whose supervisor advised AT&T (in response to AT&T's request on how Qwest was handling the jeopardy assignment) that Qwest was assigning a CO1 jeopardy code to each order not being processed. A CO1 code, commonly referred to as a CNR (Customer Not Ready) resets Qwest's order completion clock, eliminates Qwest responsibilities for delays when measuring technician performance and makes the customer, in this case AT&T or another CLEC, responsible for the delay. For PID measurements, a CO1 code automatically removes the order from inclusion in calculating many performance measurement results (examples are OP-3, OP-4, OP-6 and OP-15). Therefore, all of the delays resulting from Qwest's own system problems with UNE analog orders will not show up in a performance calculation for either August or September unless Qwest identifies and removes the CO1 code from the affected orders. If these delayed orders aren't included, high levels of performance will likely be erroneously reported. If this problem had been isolated to one CLEC for a short time then the impact would be very small. However, the LNPSMS system is used across Qwest's entire

service territories and AT&T believes that this affected all CLEC UNE analog orders in all 14 states for all 12 days.

37. This provides a clear example of how inaccurate input data can affect performance results calculations. I believe a continual review of all Qwest's monthly exclusions must occur before the input data is relied upon to calculate performance results. The Report of the Audit of Qwest's Performance Measures dated July 11, 2001 by Liberty Consulting Group, in its recommendations on page 56, stated, "Qwest should regularly track the number of records that are excluded for various reasons." Exclusions are sometimes difficult to assess, yet directly affect performance measurement results.

B. ORDERING AND PROVISIONING PIDS

1. INSTALLATION COMMITMENTS MET - OP-3

- 38. Ordering/Provisioning PID OP-3 evaluates, on a monthly basis, the extent to which Qwest installs services for customers by the scheduled due date. The measure is stated as a percentage of orders completed on or before the original scheduled due date as assigned by Qwest. As indicated earlier, a copy of the AZ 271 OP-3 PID, attached as Exhibit 4, provides the complete definition and formula for calculating this performance measure. OP-3D and OP-3E for UNE-Analog are part of Checklist Item 4 performance measures. The standard for performance is also set forth in the PID, Exhibit 4, and requires 90% commitments met each month.
- 39. Attached as **Exhibit 10** is a comparison of AT&T UNE-Analog loop order data to Qwest's CLEC specific AT&T data for Installation Commitments Met. For AT&T in Arizona,

UNE-Analog loop orders are identified for OP-3D but not for OP-3E (Interval Zone 1 and Interval Zone 2).⁷

- 40. **Exhibit 10** shows that AT&T's own data shows that Qwest is not doing as well in meeting installation commitments as shown by Qwest's AT&T data presented in the performance results report. For April, May and June, AT&T records show a **[Confidential: XXXX%]**, a **[Confidential: XXXX%]** and an **[Confidential: XXXX%]** performance, respectively, rather than a **[Confidential: XXXX%]**, a **[Confidential: XXXX%]** and **[Confidential: XXXX%]** performance as reported by Qwest. AT&T's data shows an overall Installation Commitments Met performance result for the 3 months of **[Confidential: XXXX%]** rather than a **[Confidential: XXXX%]** Installation Commitments Met performance result shown by Qwest. There are 4% (28) more orders in AT&T's records used to develop the three months of measurements, and yet there are over 15% (17) fewer orders in the numerator⁸ than reported in Qwest's results calculations. As with PID PO-5D, the differences in data are the most troubling aspect of the comparative analysis.
- 41. If the same disparity exists between all other CLECs' records and the related Qwest records, then there may be an equally disparate result, resulting in Qwest performance results being lower than the 90% standard and certainly lower than the near perfection performance presented in Qwest's results. This too ends up being a "data input" question not a "processing of data for performance results" concern.

⁷ Zone 1 is Qwest's metropolitan area and Zone 2 is Owest's rural area.

⁸ The numerator of the Installations Met PID counts the number of orders that were completed on time. The lower the numerator count, the lower the percentage of installations completed on time.

2. INSTALLATION INTERVAL – OP-4

- 42. Ordering and Provisioning PID OP-4 evaluates, on a monthly basis, the timeliness of Qwest's installation of services for customers, focusing on the average time to install service. The measure is stated as the number of average business days it took to install the orders that were completed during the month. As indicated earlier a copy of the AZ 271 OP-4 PID, included as **Exhibit 5**, provides the complete definition and formula for calculating this performance measure. UNE-Analog orders for AT&T are identified for OP-4D but not for OP-4E (Interval Zone 1 and Interval Zone 2). Both OP-4D and OP-4E UNE-Analog loops are part of Checklist Item 4 performance measures. **Exhibit 5** shows that the standard to measure LIS OP-4D and OP-4E performance against is an average 6-day completion interval.
- 43. Attached as Exhibit 11 is a comparison of AT&T order data to Qwest's CLEC specific AT&T data for UNE-Analog Installation Intervals. OP-3 and OP-4 use the same universe of UNE-Analog orders as the starting point for assessing performance. I started from a universe of [Confidential: XXX] UNE-Analog orders for April through June and from there identified [Confidential: XXX] AT&T UNE-Analog orders eligible for review and use in determining OP-4 performance. Qwest presented performance results on [Confidential: XXX] [Confidential: XXX%] fewer identified AT&T orders. The AT&T data shows a range of monthly Average Installation Intervals of [Confidential: XXX days for April, XXX days for May and XXX days for June]. Qwest's analysis shows respective intervals of [Confidential: XXX days, XXX days and XXX days]. Composite averages for the 3 month period are [Confidential: XXX days] using AT&T data and [Confidential: XXX days] using Qwest's AT&T results. These overall results show an average difference of over [Confidential: X days].

In addition, the numerators underlying each respective monthly calculation are a lot different for all months and the underlying denominators⁹ vary more than expected. I again suspect the differences are due to exclusions. If these same types of differences also exist for other CLECs, Qwest's overall CLEC reported results might be different too.

3. DELAYED DAYS IN INSTALLING SERVICE – OP-6

- 44. Ordering and Provisioning PID OP-6 evaluates the extent to which Qwest is late in installing services for customers, focusing on the average number of days that late orders are completed beyond the committed due date. A copy of the AZ 271 OP-6 PID, attached as **Exhibit 7**, provides the complete definition and formula for calculating this performance measure. OP-6-A-4 and OP-6-A-5 (Interval Zone 1 and Interval Zone 2) for UNE-Analog orders delayed beyond the original due date due to non-facility reasons, and OP-6-B-4 and OP-6-B-5 (Interval Zone 1 and Interval Zone 2) for UNE-Analog orders delayed beyond the original due date due to facility reasons are part of Checklist Item 4 performance measures. **Exhibit 7** shows that the standard to measure OP-6-A-4, OP-6-A-5, OP-6-B-4 and OP-6-B-5 performance against is "Parity with retail Residence and Business POTS with dispatch."
- 45. I have analyzed AT&T's order data, and compared it to Qwest's, in order to assess UNE-Analog trunk Delayed Days in Installing Service. Information to differentiate AT&T interconnection orders between Interval Zone 1 and Interval Zone 2 was not available from Qwest's performance results report for either PID measurement, but based on reviewing other PID results, I believe the AT&T UBL-Analog orders fall into OP-6-A-4 (non-facility delays) and OP-6-B-4 (facility delays) in Interval Zone 1.

⁹ The numerator counts the number of UBL Analog orders completed on time. The denominator counts the total number of UBL Analog orders completed. The lower the numerator, the worse the performance.

- AT&T UNE-Analog data identified [Confidential: XX] UNE-Analog orders in April, [Confidential: XX] UNE-Analog orders in May and [Confidential: XX] UNE-Analog orders in June that had delayed days, while Qwest performance data included only 1 AT&T order for this measure during the April through June reporting period. The AT&T data reveals that in the three months when AT&T experienced a delay, the average delay for non-facility reasons was [Confidential: XX] days (Exhibit 12). The delays ranged from a low of [Confidential: XXX] days in May to a high of [Confidential: XXXX] days in June. Qwest's results show a single order with a [Confidential: X] day delay in June. These are significantly different results. Qwest's Arizona report for all CLECs shows that for the retail comparison, Residence and Business POTS with dispatch, the days delayed varied from 6.54 days in May down to 4.75 days in June for retail customers, much less than AT&T's delays.
- 47. AT&T's own data also shows that there are [Confidential: X] orders in June that were delayed for an average of [Confidential: XXXX] days due to facility reasons. Qwest's AT&T results do not show any orders delayed for facility reasons.

4. COORDINATED CUTS ON TIME – UNBUNDLED LOOP – OP-13

48. Coordinated Cuts on Time evaluates the percent of coordinated cuts of unbundled loops that are completed on time, focusing on cuts completed within one hour of the committed order due time. It also focuses on the percent of cuts that were started without CLEC approval. OP-13A measures the percent of LSRs for all unbundled loops that are started and completed on time during the cutover process and OP-13B measures the percentage of all LSRs for coordinated cuts of unbundled loops that are started without CLEC approval. AZ PID OP-13, attached as Exhibit 13, provides the complete definition and formula for calculating this performance measure. Both OP-13A and OP-13B are part of Checklist Item 4 performance

measures. The OP-13A standard of performance is 95% or more completed on time. The OP-13B standards of performance for Analog unbundled loops are: 1 hour for 1 to 16 lines, 2 hours for 17 to 24 lines and a negotiated interval for projects supporting 25 or more lines.

49. Attached as Exhibit 14 is a comparison of coordinated cuts of UBL-Analog loops that are completed on time using AT&T data and Qwest's AT&T data. For April through June AT&T's own data shows [Confidential: XXX%] completions on time for April, [Confidential: XXXX%] completions on time for May and [Confidential: XXXX%] completions on time for June. Qwest's performance results show [Confidential: XXXXX] completions on time for April, [Confidential: XXXX%] completions on time for May and [Confidential: XXXX%] completions on time for June. Since the standard is 95% or more, AT&T and Qwest results both indicate that Qwest met the performance standard for only the month of June, missing the standard for the months of April and May. AT&T's own data and Qwest's results are close for each month, however there are enough differences to cause concern about the accuracy of the underlying data used in making the calculations.

5. MAINTENANCE AND REPAIR FOR UNBUNDLED LOOPS

50. There are four Maintenance and Repair PIDs for Unbundled Loops for which AT&T has its own data. They are MR-3D – Out of Service Cleared within 24 Hours, MR-4D-All troubles cleared within 48 hours, MR-6D – Mean Time to Restore and MR-7D – Repair Repeat Report Rate for Unbundled Analog Loops. MR-3D, MR-4D and MR-7D PIDs use the same "CLEC denominator" when calculating performance results, so the starting point for my data comparison was simply a month-by-month count of closed Trouble Tickets. For MR-6D, the "hours: minutes" used in calculating the mean time to restore will be based on the same set of trouble tickets as the other three measures. At this juncture, I have not matched AT&T trouble

by Qwest, but so far have not successfully matched the entire set of Qwest trouble tickets used in developing the above performance measures. Complicating this analysis is the determinations that over 10% of the AT&T troubles have more than one Qwest trouble ticket associated with them. Looking at AT&T's records, the reasons why Qwest would apply multiple trouble tickets are not always clear. I have also determined that of the 256 post installation AT&T trouble tickets identified, over 6% of the trouble tickets for lost dial tone are due to missing jumpers, wiring, and circuit cards. This finding indicates that technicians are taking these parts to either complete another installation or make another repair, or Qwest's records aren't current and the circuit is thought to be "dead". In any event, AT&T customers are losing service. In addition, over 14% of the trouble tickets for lost dial tone are caused by broken or loose wiring, an indication that Qwest technicians may not be fully trained or are hurried in making installations or repairs causing loosened wiring.

CONCLUSION

51. The comparison of Qwest's Arizona performance results with AT&T's own internal data shows that Qwest's AT&T data used to calculate almost every measure fails to match that reported by AT&T. Using AT&T data, several PIDs yield similar results to Qwest's AT&T results while other PIDs yield disparate results. Yet, the numerators and denominators developed for the performance calculations using AT&T data vary widely from those presented by Qwest in their performance results report. LIS trunk information for several PIDs is currently part of the Liberty reconciliation effort. AT&T data results indicate that Qwest's AT&T performance is not at the level professed by Qwest for either Checklist Item 1 or Checklist Item 4. If broadened to encompass all CLECs in Arizona, and assuming the same results being found

by AT&T's data are applicable to other CLECs, Qwest is not meeting its checklist performance requirements. At this juncture, this Commission has no sound basis for making factually supported 271 checklist compliance decisions for Qwest in the state of Arizona on any checklist items. For Checklist Items 1 and 4, however, it is clear that Qwest is not currently satisfying its legal obligations. In the absence of clear and reliable data on all checklist items that unequivocally show Qwest's satisfactory performance, Qwest's application must be denied.

LIST OF EXHIBITS FOR S. KAIL ARIZONA DATA AFFIDAVIT		
Exhibit 1	AZ 271 Working PID Version 6.3 - PO-5	
Exhibit 2	AZ LIS- PO-5 FOCs ON TIME (chart) CONFIDENTIAL	
Exhibit 3	AZ 271 Working PID Version 6.3 - OP-3	
Exhibit 4	AZ LIS OP-3D INSTALLATION COMMITMENTS MET (chart). CONFIDENTIAL	
Exhibit 5	AZ 271 Working PID Version 6.3 - OP-4	
Exhibit 6	AZ LIS OP-4D INSTALLATION INTERVAL (chart) CONFIDENTIAL	
Exhibit 7	AZ 271 Working PID Version 6.3 - OP-6	
Exhibit 8	AZ LIS OP-6A-4&5 AVERAGE DELAY BEYOND DUE DATE - NON-FACILITY REASONS (chart) AND OP-6B-4&5 AVERAGE DELAY BEYOND DUE DATE FOR FACILITY REASONS (chart) CONFIDENTIAL	
Exhibit 9	AZ UBL-ANALOG PO-5 FOCs ON TIME (table) CONFIDENTIAL	
Exhibit 10	AZ UBL-ANALOG OP-3D INSTALLATION COMMITMENTS MET (table) CONFIDENTIAL	
Exhibit 11	AZ UBL-ANALOG OP-4D INSTALLATION INTERVAL (table) CONFIDENTIAL	
Exhibit 12	AZ UBL-ANALOG OP-6A-4 AVERAGE DELAY BEYOND DUE DATE - NON-FACILITY REASONS AND OP-6B-4 AVERAGE DELAY BEYOND DUE DATE - FACILITY REASONS (table) CONFIDENTIAL	
Exhibit 13	AZ 271 Working PID Version 6.3 - OP-13	
Exhibit 14	AZ UBL-ANALOG OP-13A (table) CONFIDENTIAL	

PO-5 - Firm Order Confirmations (FOCs) On Time

Purpose:

Monitors the timeliness with which Qwest returns Firm Order Confirmations (FOCs) to CLECs in response to LSRs/ASRs received from CLECs, focusing on the degree to which FOCs are provided within specified intervals.

Description:

Measures the timeliness of Firm Order Confirmations (FOCs) that are provided to CLECs. PO-5A, -5B, -5C, and -5D focus on the percentage of FOCs that are provided within the intervals specified under "Standards" below for FOC notifications. PO-5E focuses on the average interval of FOC notifications for LSRs that are classified as eligible for flow-through but failed to flow-through.

- includes all LSRs/ASRs that are submitted through the specified interface or in the specified manner (i.e., facsimile) that receive an FOC during the reporting period, subject to exclusions specified below. (Acknowledgments sent separately from an FOC (e.g., EDI 997 transactions are not included.)
- For PO-5A, the interval measured is the period between the LSR received date/time (based on scheduled up time) and Qwest's response with a FOC notification (notification date and time).
- For PO-5B, 5C, 50 and 550, the interval measured is the period between the application date and time, as defined herein, and Qwest's response with a FOC notification (notification date and time).
- "Fully electronic" LSRs are those (1) that are received via IMA or EDI, (2) that involve no manual intervention, and (3) for which FOCs are provided mechanically to the CLEC.
- "Electronic/manual" LSRs are received electronically via IMA or EDI and involve manual processing.
- "Manual" LSRs are received manually (via facsimile) and processed manually.
- · ASRs are measured only in business days.
- For PO-5A, -5B, and -5C, LSRs will be evaluated according to the FOC interval categories shown
 in the "Standards" section below, based on the number of lines/services requested on the LSR or,
 where multiple LSRs from the same CLEC are related, based on the combined number of
 lines/services requested on the related LSRs.

The state of the s	
Reporting Period: One month	Unit of Measure:
	PO-5A, -5B, -5C, & -5D: Percent
	PO-5E: Business Hours:Minutes

May 1, 2001 Page 13

PO-5 - Firm Order Confirmations (FOCs) On Time (continued)

Reporting

Comparisons: CLEC aggregate and individual CLEC results

Disaggregation Reporting: Statewide level (per multi-state system serving the state).

Results for this indicator are reported as follows:

- PO-5A:* FOCs provided for <u>fully electronic LSRs</u> received via:
 - PO-5A-1 IMAPO-5A-2 EDI
- PO-5B:* FOCs provided for <u>electronic/manual</u> LSRs that are NOT classified as flow-through-eligible** for LSRs received via:
 - PO-5B-1 IMA
 - PO-5B-2 EDI
- PO-5C:* FOCs provided for manual LSRs received via Facsimile.
- PO-5D: FOCs provided for ASRs requesting LIS Trunks.
- PO-5E: FOCs provided for LSRs that are classified as flow-througheligible,** but failed to flow through, for LSRs received via: NOTE 2
 - -- PO-5E-1 IMA
 - PO-5E-2 EDI
 - * Each of the PO-5A, PO-5B, PO-5C and PO-5E measurements listed above will be further disaggregated as follows:
 - (a) FOCs provided for Resale services and UNE-P
 - (b) FOCs provided for Unbundled Loops and specified Unbundled Network Elements
 - (c) FOCs provided for LNP
 - ** The list of LSR types classified as eligible for flow through is contained in the "LSRs Eligible for Flow Through" matrix, This matrix also includes availability for enhancements to flow through capability. The matrix will be distributed through the CICMP process.

Formula:

PO-5A • [Count of LSRs for which the original FOCs "(FOC Notification Date & Time) - (LSR received date/time (based on scheduled up time))" is within 20 minutes] / (Total Number of original FOC Notifications transmitted for the service category in the reporting period).

PO--5B, -5C, & -5D = [Count of LSRs/ASRs for which the original FOCs "(FOC Notification Date & Time) - (Application Date & Time)" is within the intervals specified for the service category involved] / (Total Number of original FOC Notifications transmitted for the service category in the reporting period).

PO-5E = Σ [(FOC Notification Date & Time) - (Application Date & Time) for flow-through-eligible LSRs that did NOT flow through]/(Total Number of FOC Notifications transmitted for flow-through-eligible LSRs that did NOT flow through)

Exclusions:

- LSRs/ASRs involving individual case basis (ICB) handling based on quantities of lines, as specified
 in the "Standards" section below, or service/request types, deemed to be projects.
- Hours on Weekends and holidays.
- LSRs with CLEC-requested FOC arrangements different from standard FOC arrangements.
- For flow-through eligible LSRs, the exceptions noted in the "LSRs Eligible for Flow Through" section at the end of this PID document.matrix distributed through the CICMP process.
- Records with invalid product codes.
- Records missing data essential to the calculation of the measurement per the PID.
- Duplicate LSR numbers. (Exclusion to be eliminated upon implementation of IMA capability to disallow duplicate LSR #'s.)
- Invalid start/stop dates/times.

Additional PO-5D exclusion:

Records with invalid application or confirmation dates.

PO-5 – Firm Order Confirmations (FOCs) On Time (continued)

roduct Reporting:	Standards:	•	
	For PO-5A (all):	95% within 20 minutes	
For PO-5A, -5B, -5C and -5E:	For PO-5B (all):	90% within standard FOC in	ntervals
(a) Resale services	F = DO FO (======1):	(specified below)	
and UNE-P (POTS)	For PO-5C (manual):	90% within standard FOC in specified below PLUS 2	
(b) Unbundled	For PO-5D (LIS Trunks):	85% within eight business da	
Loops (all types) and	For PO-5E (failed flow-thr		
specified Unbundled Network Elements.	Standard FOC	Intervals for PO-5B and PO-50	<u> </u>
(c) LNP	Product Group Note 1		- FOC Interva
For PO-5D: LIS Trunks.	Resale		
Turing.	Residence and Business POT		l
	ISDN-Basic	1-10 lines	24 hours
	Conversion As is Adding/Changing fea	atures	24 nours
		y listing to established loop	ĺ
	Add call appearance		
	Centrex Non-Design	1-19 lines	}
	with no Common Bloc		ĺ
	Centrex line feature char	nges/adds/removals (all) 1-24 lines	4
	Unbundled Loops (all types)		1
			1
	Unbundled Sub-loop lincluded in product reporting	1-24 sub loops	
	Unbundled Shared-loop/Lin		1
	fincluded in product reporting		ì
	THE PROPERTY OF THE PROPERTY O	MAND (M)	1
	Unbundled Network Elemen	t-Platform (UNE-P) (POTS)	†
		t-Platform (UNE-P) (POTS)	
	Unbundled Network Element UNE-P to UNE-P convers	t-Platform (UNE-P) (POTS)	
	Unbundled Network Elemer UNE-P to UNE-P convers conversion 1-39 lines Resale ISDN-Basic	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines	
	Unbundled Network Elemer UNE-P to UNE-P convers conversion 1-39 lines Resale ISDN-Basic Conversion As Sp	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines	
	Unbundled Network Elemer UNE-P to UNE-P convers conversion 1-39 lines Resale ISDN-Basic Conversion As Sp New Installs	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines pecified	48 hours
	Unbundled Network Elemer UNE-P to UNE-P convers conversion 1-39 lines Resale ISDN-Basic Conversion As Sp New Installs Address Changes	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified	48 hours
	Unbundled Network Elemer UNE-P to UNE-P convers conversion 1-39 lines Resale ISDN-Basic Conversion As Sp New Installs Address Changes Change to add Lo	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified	48 hours
	Unbundled Network Elemer UNE-P to UNE-P convers conversion 1-39 lines Resale ISDN-Basic Conversion As Sp New Installs Address Changes	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified	48 hours
	Unbundled Network Elemer UNE-P to UNE-P convers conversion 1-39 lines Resale ISDN-Basic Conversion As Sg New Installs Address Changes Change to add Lo ISDN-PRI (Facility) PBX	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks	48 hours
	Unbundled Network Elemer UNE-P to UNE-P convers conversion 1-39 lines Resale ISDN-Basic Conversion As Sp New Installs Address Changes Change to add Lo ISDN-PRI (Facility) PBX DS0 or Voice Grade I	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks Equivalent 1-24	48 hours
	Unbundled Network Elemer UNE-P to UNE-P converse conversion 1-39 lines Resale ISDN-Basic Conversion As Spanew Installs Address Changes Change to add Louis ISDN-PRI (Facility) PBX DS0 or Voice Grade IsDS1 Facility	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks Equivalent 1-24 1-24	48 hours
	Unbundled Network Elemer UNE-P to UNE-P converse conversion 1-39 lines Resale ISDN-Basic Conversion As Spanew Installs Address Changes Change to add Lot ISDN-PRI (Facility) PBX DS0 or Voice Grade to DS1 Facility DS3 Facility	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks Equivalent 1-24 1-24 1-3	48 hours
	Unbundled Network Elemer UNE-P to UNE-P converse conversion 1-39 lines Resale ISDN-Basic Conversion As Spanew Installs Address Changes Change to add Louis ISDN-PRI (Facility) PBX DS0 or Voice Grade IsDS1 Facility	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks Equivalent 1-24 1-24	48 hours
	Unbundled Network Elemer UNE-P to UNE-P converse conversion 1-39 lines Resale ISDN-Basic Conversion As Spanew Installs Address Changes Change to add Lot ISDN-PRI (Facility) PBX DS0 or Voice Grade to DS1 Facility DS3 Facility	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks Equivalent 1-24 1-24 1-3	48 hours
	Unbundled Network Elemer UNE-P to UNE-P converse conversion 1-39 lines Resale ISDN-Basic Conversion As Spanew Installs Address Changes Change to add Lot ISDN-PRI (Facility) PBX DS0 or Voice Grade to DS1 Facility DS3 Facility	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks Equivalent 1-24 1-24 1-3	48 hours
	Unbundled Network Elemer UNE-P to UNE-P converse conversion 1-39 lines Resale ISDN-Basic Conversion As Spanew Installs Address Changes Change to add Lot ISDN-PRI (Facility) PBX DS0 or Voice Grade to DS1 Facility DS3 Facility	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks Equivalent 1-24 1-24 1-3	48 hours
	Unbundled Network Elemer UNE-P to UNE-P converse conversion 1-39 lines Resale ISDN-Basic Conversion As Spanew Installs Address Changes Change to add Lot ISDN-PRI (Facility) PBX DS0 or Voice Grade to DS1 Facility DS3 Facility	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks Equivalent 1-24 1-24 1-3	48 hours
	Unbundled Network Elemer UNE-P to UNE-P converse conversion 1-39 lines Resale ISDN-Basic Conversion As Spanew Installs Address Changes Change to add Lot ISDN-PRI (Facility) PBX DS0 or Voice Grade to DS1 Facility DS3 Facility	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks Equivalent 1-24 1-24 1-3	48 hours
	Unbundled Network Elemer UNE-P to UNE-P converse conversion 1-39 lines Resale ISDN-Basic Conversion As Spanew Installs Address Changes Change to add Lot ISDN-PRI (Facility) PBX DS0 or Voice Grade to DS1 Facility DS3 Facility	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks Equivalent 1-24 1-24 1-3	48 hours
	Unbundled Network Elemer UNE-P to UNE-P converse conversion 1-39 lines Resale ISDN-Basic Conversion As Spanew Installs Address Changes Change to add Lot ISDN-PRI (Facility) PBX DS0 or Voice Grade to DS1 Facility DS3 Facility	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks Equivalent 1-24 1-24 1-3	48 hours
	Unbundled Network Elemer UNE-P to UNE-P converse conversion 1-39 lines Resale ISDN-Basic Conversion As Spanew Installs Address Changes Change to add Lot ISDN-PRI (Facility) PBX DS0 or Voice Grade to DS1 Facility DS3 Facility	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks Equivalent 1-24 1-24 1-3	48 hours
lay 1, 2001	Unbundled Network Elemer UNE-P to UNE-P converse conversion 1-39 lines Resale ISDN-Basic Conversion As Spanew Installs Address Changes Change to add Lot ISDN-PRI (Facility) PBX DS0 or Voice Grade to DS1 Facility DS3 Facility	t-Platform (UNE-P) (POTS) ion and Resale to UNE-P 1-10 lines secified 1-3 1-24 trunks Equivalent 1-24 1-24 1-3	48 hours

PO-5 - Firm Order Confirmations (FOCs) On Time (continued)

	With Common BI Initial establishmen Tie lines or NARs Subsequent to in Station line Automati	21 Basic ISDN, n, Centrex Primes) 1-10 lines ock Configuration required ent of Centrex CMS services s activity itial Common Block	72 hours
	Resale ISDN-PRI (Trunks)	1-12 trunks	96 hours
	For PO-5D: LIS Trunks	1-240 trunk circuits	8 business days
Availability • Available(except as noted below) - Under Development: - Exclusion of ICBs for ISDN Basis, ISDN-PRI, PBX, USO, UST, and US3 beginning with Jan 01 on the Feb 01 report		Notes: 1. LSRs with quantities above the number specified for each prod considered ICB. 2. With reference to PO-5E, begin 00, as a result of the auto-push enhancement, Qwest will also pnear-immediate, electronic notific	highest uct type are ning in Dec status provide a fication to

			•		
•					
·4					
	•	•			
					,
				·	

OP-3 – Installation Commitments Met

Purpose:

Evaluates the extent to which Qwest installs services for Customers by the scheduled due date.

Description:

Measures the percentage of orders for which the scheduled due date is met.

 All inward orders (Change, New, and Transfer order types) assigned a due date by Qwest and which are completed/closed during the reporting period are measured, subject to exclusions specified below. Change order types for additional lines consist of all C orders with "I" and "T" action coded line USOCs, including changes to existing lines, such as conversions, number changes, PIC changes and class of service changes. These include orders with customer-requested due dates longer than the standard interval.

· Completion date on or before original due date is counted as a met due date.

Reporting Period: One month

Unit of Measure: Percent

Reporting Comparisons: CLEC aggregate, individual CLEC and Qwest Retail results

Disaggregation Reporting: Statewide level.

- Results for product/services listed in Product Reporting under "MSA-Type Disaggregation" will be reported according to orders involving:
 - OP-3A Dispatches within MSAs;
 - OP-3B Dispatches outside MSAs; and
 - OP-3C No dispatches.
- Results for products/services listed in Product Reporting under "Zone -type Disaggregation" will be disaggregated according to installations:
 - OP-3D In Zone 1 areas; and
 - OP-3E In Zone 2 areas.

Formula:

[(Total Orders completed on or before the Original Due Date) / (Total Orders Completed in the Reporting Period)] x 100

<u>Explanation</u>: The percent commitments met is obtained by dividing the total number of service orders completed on or before the original due date by the total number of service orders completed during the measurement period.

Exclusions:

- Disconnect, From (another form of disconnect) and Record order types.
- Due dates missed for standard categories of customer reasons and non-Qwest reasons. Standard
 categories of customer reasons are: previous service at the location did not have a customerrequested disconnect order issued, no access to customer premises, customer hold for payment,
 customer changed due date to earlier appointment, or customer requested a later due date when
 the technician arrived to do the work. Standard categories of non-Qwest reasons are:
 Weather/Disaster/Work Stoppage.
- Records involving official company services.
- · Records with invalid due dates or application dates.
- · Records with invalid completion dates.
- Records with invalid product codes.
- · Records missing data essential to the calculation of the measurement per the PID.

OP – 3 Installation Commitments Met (continued)

Product Reporting:	Standards:
MSA-Type Disaggregation -	
Resale	
Residential single line service	Parity with retail service
Business single line service	Parity with retail service
Centrex	Parity with retail service
Centrex 21	Parity with retail service
DS0 (non-designed provisioning)	Parity with retail service
PBX Trunks (non-designed provisioning)	Parity with retail service
Primary ISDN (non-designed provisioning)	Parity with retail service
Basic ISDN (non-designed provisioning)	Parity with retail service
Qwest DSL (non-designed provisioning)	Parity with retail service
Unbundled Network Element – Platform	Parity with like retail service
(UNE-P) (POTS)	
Unbundled Loops:	
Analog Loop (non-designed provisioning)	90%
Shared Loop/Line Sharing	Diagnostic
Sub-Loop Unbundling	Diagnostic
Zone -Type Disaggregation -	Siddingard
Resale Resale	Dority with retail conting
Primary ISDN (designed provisioning)	Parity with retail service
Basic ISDN (designed provisioning)	Parity with retail service Parity with retail service
DS0 (designed provisioning)	
DS1	Parity with retail service
PBX Trunks (designed provisioning)	Parity with retail service
Qwest DSL (designed provisioning)	Parity with retail service
DS3 and higher bit-rate services	Parity with retail service
(aggregate)	Partie de la
Frame Relay	Parity with retail service
LIS Trunks	Feature Group D (aggregate)
 Unbundled Dedicated Interoffice Transport 	
(UDIT)	
UDIT DS1 level	Parity with retail DS1 Private Line
UDIT - Above DS1 level	Parity with retail Private Lines above DS1 level
Dark Fiber - IOF	Diagnostic
Unbundled Loops:	
Analog Loop (designed provisioning)	90%
Non-loaded Loop (2-wire)	90%
Non-loaded Loop (4-wire)	Parity with retail DS1 Private Line
DS1-capable Loop	Parity with retail DS1 Private Line
ISDN-capable Loop	Parity with retail ISDN BRI
ADSL-qualified Loop	90%
Loop types of DS3 and higher bit-rates	Parity with retail DS3 and higher bit-rate Private
(aggregate)	Line services (aggregate)
Dark Fiber – Loop	Diagnostic
E911/911 Trunks	Parity with retail E911/911 Trunks
Enhanced Extended Links (EELs)	Diagnostic
Availability:	Notes:
Available:	

•				
			•	

OP-4 - Installation Interval

Purpose

Evaluates the timeliness of Qwest's installation of services for customers, focusing on the average time to install service.

Description:

Measures the average interval (in business days)¹ between the application date and the completion date for service orders accepted and implemented.

 All inward orders (Change, New, and Transfer order types) assigned a due date by Qwest and which are completed/closed during the reporting period are measured, subject to exclusions specified below. Change order types for additional lines consist of all C orders with "I" and "T" action coded line USOCs, including changes to existing lines, such as conversions, number changes, PIC changes and class of service changes.

Intervals for each measured event are counted in whole days: the application date is day zero (0);
 the day following the application date is day one (1).

Reporting Period: One month

Unit of Measure: Average Business Days

Reporting Comparisons: CLEC aggregate, individual CLEC and Qwest Retail results

Disaggregation Reporting: Statewide level.

 Results for product/services listed in Product Reporting under "MSA-Type Disaggregation" will be reported according to orders involving:

OP-4A Dispatches within MSAs;

OP-4B Dispatches outside MSAs; and

OP-4C No dispatches.

 Results for products/services listed in Product Reporting under "Zone -type Disaggregation" will be disaggregated according to installations:

OP-4D In Zone 1 areas; and OP-4E in Zone 2 areas.

Formula:

 Σ [(Order Completion Date) – (Order Application Date)] / Total Number of Orders Completed in the reporting period

Explanation: The average installation interval is derived by dividing the sum of installation intervals for all orders (in business days)¹ by total number of service orders completed in the reporting period.

Exclusions:

- Orders with customer requested due dates greater than the current standard interval. (This
 exclusion does <u>not</u> apply to LIS trunks, ISDN-capable unbundled loops, and products reported
 under "MSA-Type Disaggregation,", for which orders for all requested intervals are included.)
- Orders with intervals lengthened due to customer-caused delays.
- Disconnect, From (another form of disconnect) and Record order types.
- · Records involving official company services.
- Records with invalid due dates or application dates.
- Records with invalid completion dates.
- · Records with invalid product codes.
- Records missing data essential to the calculation of the measurement per the PID.

OP-4 – Installation Interval (continued)

Product Reporting:	Standards:
ISA-Type Disaggregation -	
Resale	
Residential single line service	Parity with retail service
Business single line service	Parity with retail service
Centrex	Parity with retail service
Centrex 21	Parity with retail service
DS0 (non-designed provisioning)	Parity with retail service
PBX Trunks (non-designed provisioning)	Parity with retail service
Primary ISDN (non-designed	Parity with retail service
provisioning)	
Basic ISDN (non-designed provisioning)	Parity with retail service
Qwest DSL (non-designed provisioning)	Parity with retail service
Unbundled Network Element – Platform	Parity with like retail service
(UNE-P) (POTS)	
Unbundled Loops:	
Analog Loop (non-designed provisioning)	6 days
Shared Loop/Line Sharing	Diagnostic
Sub-Loop Unbundling	Diagnostic
	Diagnosiic
one -Type Disaggregation -	
• Resale	
Primary ISDN (designed provisioning)	Parity with retail service
Basic ISDN(designed provisioning)	Parity with retail service
DS0 (designed provisioning)	Parity with retail service
DS1	Parity with retail service
PBX Trunks (designed provisioning)	Parity with retall service
Qwest DSL (designed provisioning)	Parity with retail service
DS3 and higher bit-rate services	Parity with retail service
(aggregate)	D. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10
Frame Relay	Parity with retail service
• LIS Trunks	Parity with Feature Group D (aggregate)
Unbundled Dedicated Interoffice Transport	
(UDIT)	1
UDIT – DS1 level	Parity with DS1 Private Line Service
UDIT - Above DS1 level	Parity with Private Lines above DS1 level
Dark Fiber – IOF	Diagnostic
Unbundled Loops:	
Analog Loop (designed provisioning)	6 days
Non-loaded Loop (2-wire)	6 days
Non-loaded Loop (4-wire)	Parity with retall DS1Private Line
DS1-capable Loop	Parity with retail DS1 Private Line
ISDN-capable Loop	Parity with retail ISDN BRI
ADSL-qualified Loop	6 days
Loop types of DS3 and higher bit-rates	Parity with retail DS3 and higher bit-rate services
(aggregate)	(aggregate)
Dark Fiber – Loop	Diagnostic
• E911/911 Trunks	Parity with retail E911/911 Trunks
Enhanced Extended Links (EELs)	Diagnostic
Vailability:	Notes:
Available	Saturday is counted as a business day when the

May 1, 2001 Page 27

•			
•			

OP-6 - Delayed Days

Purpose:

Evaluates the extent Qwest is late in installing services for customers, focusing on the average number of days that late orders are completed beyond the committed due date.

Description:

OP-6A – Measures the average number of business days¹ that service is delayed beyond the original due date provided to the customer for non-facility reasons attributed to Qwest. All inward orders (Change, New, and Transfer order types) that are completed/closed during the reporting period, but later than the original due date assigned by Qwest, are measured, subject to exclusions specified below. Change order types for additional lines consist of all C orders with "I" and "T" action coded line USOCs, including changes to existing lines, such as conversions, number changes, PIC changes and class of service changes.

OP-6B – Measures the average number of business days ¹ that service is delayed beyond the original due date provided to the customer for facility reasons attributed to Qwest. All inward orders (Change, New, and Transfer order types) that are completed/closed during the reporting period, but later than the original due date assigned by Qwest due to facility reasons, are measured, subject to exclusions specified below.

Reporting Period: One month

Unit of Measure: Average Business Days

Reporting Comparisons: CLEC aggregate, individual CLEC and Qwest Retail results

Disaggregation Reporting: Statewide level.

- Results for products/services listed under Product Reporting under "MSA-type Disaggregation" will be reported for OP-6A and OP-6B according to orders involving:
 - 1. Dispatches within MSAs:
 - 2. Dispatches outside MSAs; and
 - 3. No dispatches.
- Results for products/services listed in Product Reporting under "Zone-type Disaggregation" will be disaggregated according to installations:
 - 4. In Zone 1 areas; and
 - 5. In Zone 2 areas.

Formula:

OP-6A = \sum [(Actual Completion Date of late order for non-facility reasons) – (Original Due Date of late order)] / (Total Number of Late Orders for non-facility reasons)

OP-6B = \sum [(Actual Completion Date of late order for facility reasons) – (Original Due Date of late order)] / (Total Number of Late Orders for facility reasons)

Exclusions:

- Orders delayed due to Customer reasons are excluded.
- · Disconnect, From (another form of disconnect) and Record order types.
- · Records involving official company services.
- · Records with invalid due dates or application dates.
- Records with invalid completion dates.
- Records with invalid product codes.
- Records missing data essential to the calculation of the measurement per the PID.

May 1, 2001 Page 30

OP-6 - Delayed Days (continued)

OP-6 - Delayed Days (continued)					
Product Reporting:	Standards:				
MSA-Type Disaggregation -					
Resale –					
Residential single line service	Parity with retail service				
Business single line service	Parity with retail service				
Centrex	Parity with retail service				
Centrex 21	Parity with retail service				
DS0 (non-designed provisioning)	Parity with retail service				
PBX Trunks (non-designed provisioning)	Parity with retail service				
Primary ISDN (non-designed provisioning)	Parity with retail service				
Basic ISDN (non-designed provisioning)	Parity with retail service				
Qwest DSL (non-designed provisioning)	Parity with retail service				
Unbundled Network Element – Platform (UNE-P) (POTS)	Parity with like retail service				
Unbundled Loops:					
Analog Loop (non-designed provisioning)	Parity with retail Res and Bus POTS with dispatch				
Shared Loop/Line Sharing	Diagnostic				
Sub-Loop Unbundling	Diagnostic				
Zone-Type Disaggregation -	- Constitution of the cons				
Resale Primary ISDN (designed provisioning)	Parity with retail service				
	Parity with retail service				
Basic ISDN (designed provisioning) DS0 (designed provisioning)	Parity with retail service				
DS1 (designed provisioning)					
	Parity with retail service				
PBX Trunks (designed provisioning)	Parity with retail service				
Qwest DSL (designed provisioning)	Parity with retail service				
DS3 and higher bit-rate services	Parity with retail service				
(aggregate)	Photos with motoli and the				
Frame Relay	Parity with retail service				
LIS Trunks Unbundled Dedicated Interoffice Transport (UDIT)	Parity with Feature Group D (aggregate)				
UDIT - DS1 level	Parity with retail DS1 Private Line- Service				
UDIT – Above DS1 level	Parity with retail Private Line- Services above DS1 level				
Dark fiber – IOF	Diagnostic				
Unbundled Loops:					
Analog Loop (designed provisioning)	Parity with retail Res and Bus POTS with dispatch				
Non-loaded Loop (2-wire)	Parity with retail ISDN BRI				
Non-loaded Loop (4-wire)	Parity with retail DS1 Private Line				
DS1-capable Loop	Parity with retail DS1 Private Line				
ISDN-capable Loop	Parity with retail ISDN BRI				
ADSL-qualified Loop	Parity with retail Qwest DSL, with dispatch				
Loop types of DS3 and higher bit-rates	Parity with retail DS3 and higher bit-rate Private				
(aggregate)	Line services (aggregate)				
Dark Fiber – Loop	Diagnostic				
• E911/911 Trunks	Parity with retail E911/911 Trunks				
Enhanced Extended Links (EELs)	Diagnostic				
Availability:	Notes:				
Available:	Saturday is counted as a business day when the service order is completed on Saturday,				

May 1, 2001 Page 31

•				
•				

OP-13 - Coordinated Cuts On Time - Unbundled Loop

Purpose:

Evaluates the percentage of coordinated cuts of unbundled loops that are completed on time, focusing on cuts completed within one hour of the committed order due time and the percent that were started without CLEC approval.

Description:

- Includes all LSRs for coordinated cuts of unbundled loops that are completed/closed during the reporting period, subject to exclusions specified below.
- OP-13A Measures the percentage of LSRs (CLEC orders) for all coordinated cuts of unbundled loops that are started and completed on time. For coordinated loop cuts to be counted as "on time" in this measurement, the CLEC must agree to the start time, and Qwest must (1) receive verbal CLEC approval before starting the cut or lifting the loop, (2) complete the physical work and appropriate tests, (3) complete the Qwest portion of any associated LNP orders and (4) call the CLEC with completion information, all within one hour of the committed order due time.
- OP-13B Measures the percentage of all LSRs for coordinated cuts of unbundled loops that are actually started without CLEC approval.
- "Scheduled start time" is defined as the confirmed appointment time (as stated on the FOC), or a newly negotiated appointment time.
- The "committed order due time" is based on the number and type of loops involved in the cut and
 is calculated by adding the applicable time interval from the following list to the scheduled start
 time:
 - Analog unbundled loops:

1 to 16 lines: 1 Hour 17 to 24 lines: 2 Hours 25+ lines: Project*

All other unbundled loops:

1 to 5 lines: 1 Hour 6 to 8 lines: 2 Hours 9 to 11 lines: 3 Hours 12 to 24 lines: 4 Hours 25+ lines: Project*

*For Projects scheduled due dates and scheduled start times will be negotiated between CLEC and Qwest, but no committed order due time is established. Therefore, projects are not included in OP-13A (see exclusion below).

- "Stop time" is defined as when Qwest notifies the CLEC that the Qwest physical work and the
 appropriate tests have been successfully accomplished, including the Qwest portion of any
 coordinated LNP orders.
- Where Qwest's records of completed coordinated cut transactions are missing evidence of CLEC approval of the cutover, the cut will be counted as a miss under both OP-13A and OP-13B.

Reporting Period: One month	Unit of Measure: Percent
Reporting Comparisons: CLEC aggregate and individual CLEC results	Disaggregation Reporting: Statewide level. Results for this measurement will be reported according to: OP-13A Cuts Completed On Time OP-13B Cuts Started Without CLEC Approval

OP-13 - Coordinated Cuts On Time - Unbundled Loop (continued)

Formula:

- OP-13A = (Count of LSRs for Coordinated Unbundled Loop cuts completed "On Time") / (Total Number of LSRs for Coordinated Unbundled Loop Cuts completed in the reporting period) x 100
- OP-13B = (Count of LSRs for Coordinated Unbundled Loop cuts whose actual start time occurs without CLEC approval) / (Total Number of LSRs for Coordinated Unbundled Loop Cuts completed in the reporting period) x 100

Exclusions:

Applicable to OP-13A:

- Time intervals following the scheduled start time or during the cutover process associated with CLEC-caused delays;
- CLEC not ready by 30 minutes after the Appointment Time.
- Loop cuts that involve CLEC-requested non-standard methodologies, processes, or timelines. OP-13A & B:
- · Records with invalid completion dates.
- Records missing data essential to the calculation of the measurement per the PID (which are not otherwise designated to be "counted as a miss".
- · Invalid start/stop dates/times or invalid scheduled date/times.

Projects involving 25 or more lines.

Projects involving 25 or more lines. Product Reporting: Coordinated Unbundled Loops – Reported separately for: • Analog Loops • All Other Loops	Standard: OP-13A: 90 Percent or more OP-13B: Diagnostic		
Availability: Available	Notes:		

VERIFICATION OF STEPHEN L. KAIL

I, Stephen L. Kail, being duly sworn, hereby state that I am self-employed as a Telecommunications Consultant and that I am providing expertise on the analysis of Qwest performance results in this docket. By this Verification, I hereby verify that the factual assertions in the Affidavit of Stephen L. Kail on Behalf of AT&T Regarding Analysis of Qwest Performance Data are true and correct statements to the best of my knowledge and belief.

FURTHER AFFIANT SAYETH NOT.

Dated this 315 day of October 2001.

Stephen S. Kail
Stephen L. Kail

STATE OF COLORADO)	
)	SS
CITY AND COUNTY OF DENVER)	

SUBSCRIBED AND SWORN TO before me on this <u>3/5/</u> day of October 2001 by Stephen L. Kail, who certifies that the foregoing is true and correct to the best of his knowledge and belief.

Witness my hand and official seal.

Of Lander Res Constant Public

My commission expires:

5-3-02

ORIGINAL

BEFORE THE ARIZONA PUBLIC REGULATION COMMISSION

Chairman JAMES M. IRVIN Commissioner		
MARC SPITZER Commissioner		
IN THE MATTER OF U.S. WEST)	DOCKET NO. T-00000A-97-0238
COMMUNICATIONS, INC.'S COMPLIANCE WITH § 271 OF THE)	DOCKET NO. 1-00000A-97-0230
TELECOMMUNICATIONS ACT OF	3	

1996)

AFFIDAVIT OF JOHN F. FINNEGAN ON BEHALF OF AT&T

REGARDING ANALYSIS OF QWEST PERFORMANCE RESULTS

NOVEMBER 1, 2001

Arizona Corporation Commission DOCKETED

NOV 0 2 2001

DOOKETEL	BY	- 10 mm

AT&T Communications of the Mountain State, Inc. and TCG Phoenix (collectively, "AT&T") hereby submit this Affidavit of John F. Finnegan regarding AT&T's Analysis of Qwest Performance Results before the Arizona Corporation Commission ("Commission").

I. INTRODUCTION & QUALIFICATIONS

- 1. My name is John F. Finnegan, and I am a senior policy witness employed by AT&T. My business address is 1875 Lawrence Street, Suite 1400, Denver, Colorado 80202.
- 2. My education and relevant work experience are as follows. I have a B.S. in Engineering from Rutgers College of Engineering and an M.B.A from the University of Denver. I have worked for AT&T for 18 years. After graduating from Rutgers, I spent the next two years with Combustion Engineering in Valley Forge, PA as a Project Engineer. In 1983, I joined AT&T as a purchased product engineer. Over the next 12 years, I spent time with AT&T in a variety of engineering, quality management, sales and marketing positions. Almost half of that time was spent leading a supplier quality management organization.
- 3. In 1995, I joined the New Markets Development Organization, (the immediate predecessor to the Western Region Local Services Organization) and was one of the first employees in the Western Region to explore the opportunities associated with providing local exchange services. In 1996 I began in my current position. Recently I have concentrated my work efforts on collaborating with Qwest, CLECs and state regulators on understanding and evaluating Qwest's operational support system ("OSS"). In fact, I have been AT&T's representative in the Arizona and the Regional Oversight

Committee's ("ROC") OSS tests since their inception. I am a frequent panelist on ROC OSS issues.

II. SUMMARY OF AFFIDAVIT

- 4. I have been involved in the ROC OSS testing process from the beginning. As part of that, I was involved in creating and defining the PIDs that govern the performance results that Qwest is reporting in this docket. While AT&T's other witness on performance issues, Mr. Stephen L. Kail, discusses what AT&T's own data shows with respect to Qwest's commercial performance, my affidavit focuses solely on Qwest's own reported performance data and what that data shows. My analysis concludes that even if the Arizona Commission and/or the FCC do not require flawless performance by Qwest on every PID for every checklist item, it cannot be disputed that Qwest's performance currently falls far short of required performance at least for checklist items 1, 2, 4, 5 and 14. Qwest's reported performance requires that the Commission find that Qwest currently fails to satisfy its obligations under these four checklist items.
- 5. My affidavit points out numerous examples of Qwest's failure to meet either the required benchmark or parity standard, whichever applies, for PIDs governing each of the above checklist items. Although my affidavit is not necessarily exhaustive with respect to Qwest's non-compliance, I have pointed out some of the more serious instances of non-compliance, and plenty for the Commission to conclude that Qwest cannot currently meet its obligations with respect to checklist items 1, 2, 4, 5 and 14. Significantly, Qwest's non-compliance occurs most often with regard to PIDs that

¹ Although Qwest made a filing on October 19, 2001 to include performance results for August of 2001, I have not yet completed my analysis for the latest month's data. I have confined the instant analysis to months currently being reconciled with Qwest to the months reported in Qwest's August 28, 2001 Performance Measurement Report.

directly and noticeably affect a customer's experience with a new CLEC provider; i.e., time to install and repair service, process an order, etc. Instances such as these where Qwest clearly provides better service to its retail customer, and thereby fails to satisfy the Federal Telecommunications Act's obligations of parity and non-discrimination, are precisely the activity that will keep local competition from ever gaining a foothold in Washington.

- 6. Qwest relies in its comments on an audit of Qwest's performance data conducted by CGE&Y as part of the Arizona test of Qwest's OSS as well as Liberty Consulting's audit as part of the Regional Oversight Committee's (ROC's) test of Qwest's OSS systems as proof that Qwest's data is accurate and can be relied upon. (See Qwest comments filed September 21, 2001, pp. 5-6.) However, the limited audit that has been performed to date by both CGE&Y and Liberty Consulting audited primarily the processes that Qwest uses to track and report its performance. Although the audit sampled the data underlying the reported results, the audit did not perform a complete review of the input data that forms the basis for the reported results. See Liberty Consulting "Report on the Audit of Qwest's Performance Measures," July 11, 2001, p. 1.
- 7. Instead, Liberty is just beginning to perform that kind of in-depth analysis in a process that is expected to be completed in the middle of November of 2001. In addition, as the functionality test portion of the Arizona OSS test occurs, CGE&Y will be attempting to replicate Qwest's reported data in another effort to analyze the accuracy of the input data underlying Qwest's reported performance. Until that occurs, this Commission cannot rely on Qwest's data to show that it is satisfying its performance obligations.

III. LEGAL STANDARDS TO BE APPLIED

- 8. The FCC requires that incumbent local exchange carriers ("ILECs") such as Qwest must provide services and unbundled network elements to competitive local exchange carriers ("CLECs") at parity and in a nondiscriminatory fashion.² Where the service or element being provided has a retail analogue, Owest must provide access to CLECs in "substantially the same time and manner" as it provides to itself.³ For those services that do not have a retail analogue, the ILEC's service must provide the CLECs with a meaningful opportunity to compete.⁴
- 9. The FCC has determined that in order to meet the obligations set forth in the previous paragraph, the ILEC must generally demonstrate through reported measures of performance that the performance for its own customers does not differ in any statistically significant fashion from the service provided to the CLECs and the CLECs' customers.⁵ If a benchmark or parity requirement is missed, an ILEC will fail to satisfy that checklist item unless the misses are "slight, or occur in isolated months, and thus suggest only an insignificant competitive impact." A steady improvement in performance may indicate that problems are being resolved. Where performance is decreasing over time, however, this creates a cause for concern and indicates that checklist items are not being met. The FCC will consider "the degree and duration of the

² Application of Verizon New York Inc., Verizon Long Distance, Verizon Enterprise Solutions, Verizon Global Networks Inc. and Verizon Select Services, Inc. for Authorization to Provide In-Region, InterLATA Services in Connecticut, CC Docket 01-100, FCC 01-269 (September 19, 2001) at Appendix D, ¶ 5 [hereinafter "Verizon Connecticut 271 Order"]. ld.

⁴ *Id*.

⁵ Verizon Connecticut 271 Order at Appendix D, ¶ 8; In the Matter of Joint Application by SBC Communications Inc., Southwestern Bell Communications Services, Inc. d/b/a Sought Western Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma, CC Docket No. 00-217, FCC 01-29 (January 22, 2001) at ¶ 31 [hereinafter "SBC Kansas/Oklahoma 271 Order"]. ⁶ SBC Kansas/Oklahoma 271 Order at ¶ 32.

performance disparity, and whether the performance is part of an improving or deteriorating trend." In fact, "disparity with respect to one performance measurement may support a finding of statutory noncompliance, particularly if the disparity is substantial or has endured for a long time, or if it is accompanied by other evidence of discriminatory conduct or evidence that competing carriers have been denied a meaningful opportunity to compete."

IV. DATA ANALYSIS

A. CHECKLIST ITEM #1 LOCAL INTERCONNECTION

1. <u>INSTALLATION</u>

OP-3 Installation Commitments Met – Interval Zone One.

The OP-3 Installation Commitments Met results for interval zone one showed that Qwest provided worse performance to CLECs in nine of the last twelve months of reported data. (See Exhibit 1 to Qwest's September 21, 2001 filing entitled, "Qwest Corp.'s July Performance Data As Reported Under the Arizona Performance Measurements" herein "Ex. 1, p. 1"). Interval zone one represents the urban areas of Arizona. For the state of Arizona, urban areas represent the largest CLEC activity. In two of the months of reported data (Jan-01 and Sep-00) the Qwest performance for CLEC interconnection trunks was so poor that random variation can be ruled out as the cause of the inferior performance to CLECs.

OP-4 Installation Interval (Average Days) – Interval Zone One.

Qwest's inferior performance in installing CLEC interconnection trunks in interval zone one is also evident with respect to the time to install interconnection trunks.

⁷ *Id*. at ¶ 31

⁸ Verizon Connecticut 271 Order at Appendix D, ¶ 9.

In six of the last eight months, Qwest's performance to CLECs was worse than the performance for Qwest's retail customers. (See Ex. 1. p. 1) Over the last four months of reported results, the performance trend for installation of CLEC interconnection trunks is getting worse.

OP-15A Interval for Pending Orders Delayed Past Due Date

While this is not a measure that is contained in the Arizona Performance Indicator Definitions ("PIDs"), a review of the regional performance results shows that Qwest has a serious held order problem and that the problem is getting worse. The regional results show that during the last twelve months the number of orders at the end of a month that were late and not yet completed (See Exhibit 2 to Qwest's September 21, 2001 filing entitled, "Qwest Corp.'s July Performance Data As Reported Under the Arizona Performance Measurements" herein "Ex. 2, p. 3" for the OP-15A denominator) was close to or greater than the total number of orders that Qwest completed in a month (See Ex. 2, pp. 1 (OP-3 denominator) and 2 (OP-3 denominator).

In addition to having a very high ratio of pending orders to completed orders in a month, the length of time the orders are pending is extremely long and getting worse. The average number of business days late for a pending order has increased from 59.14 business days to 60.94 business days to 80.94 business days in May-01, Jun-01 and Jul-01. The average monthly interval for pending orders has not been less that 45.64 business days (Sep-00) and has been as high as 86.73 business days (Jan-01). It is extremely disruptive to CLEC operations to have Qwest commit to an installation due date and then have to wait over five months after the original order was placed to finally have the interconnection trunk installed.

2. MAINTENANCE AND REPAIR

MR-7 Repair Repeat Report Rate - Interval Zone One

The number of Arizona-specific data points for both CLEC and retail repair report rate results are fairly low. Therefore, AT&T's analysis focused on the Qwest regional results. Qwest's reported repair repeat report rate results show that Qwest is not doing as well in repairing CLEC interconnection trunks as it is in repairing Feature Group D trunks (the retail analogue). The MR-7 measurement was intended to be an indicator of whether Qwest was able to repair a reported trouble right the first time. If Qwest does not repair the service right the first time, a repeated trouble report can occur within thirty days of the first trouble report. How well Qwest does in correctly repairing troubles the first time is what the MR-7 measurement is all about. In seven of the twelve months of reported data, Qwest's results for CLEC repairs were worse than the results for retail repairs. In four of those months the difference was so great as to be a statistically significant difference. (See Ex. 2. p. 5)⁹

MR-7 Repair Repeat Report Rate – Interval Zone Two

The number of Arizona-specific data points for both CLEC and retail repair report rate results are also low for the MR-7 measurement in interval zone two (rural areas). Therefore, AT&T's analysis focused on the Qwest regional results. Qwest's reported repair repeat report rate results show that in rural areas Qwest is not doing as good a job in repairing CLEC interconnection trunks as it is in repairing retail Feature Group D trunks. In eleven of the twelve months of reported data, Qwest's results for CLEC

⁹ Qwest performance to CLECs is deemed to be worse by a statistically significant amount when the result in the column labeled "Mod Z Scr" is positive and greater than 1.645. The higher the positive modified Z score and positive Parity Score (column located next to "Mod Z Scr"), the greater the discrimination to CLECs.

repairs were worse than the results for retail repairs. (See Ex. 2, p. 6) In four of those months, the difference was so great as to be a statistically significant difference.

MR-8 Trouble Rate - Interval Zones One and Two

Qwest's performance results show that Qwest does a worse job of maintaining CLEC interconnection trunk circuits than it does for retail Feature Group D trunks. In seven of the last twelve months of reported data, the CLEC interconnection trunk trouble rate was higher than the retail Feature Group D trouble rate. (See Ex. 1. p. 5) In two of those months (Nov-00 and Jan-01) the difference was so great that it can be considered a statistically significant difference.

B. CHECKLIST ITEM #2 ACCESS TO UNBUNDLED NETWORK ELEMENTS (INCLUDING OSS)

1. PRE-ORDER ACTIVITIES

PO-1C-1 Pre-Order Response Times (Timeout) (Percent) IMA Total

The March 2001 results clearly demonstrate that, despite the completion of the performance measurement audit by CGE&Y, problems with Qwest's processes for calculating performance results still exist. In the March 2001 results for PO-1C-1 the numerator is 2 and the denominator is 10,199. (See Ex. 1. p. 22) Qwest reports the result of this calculation (i.e., dividing the numerator into the denominator) as 2.00%. Qwest's calculation is incorrect. The correct result of dividing 2 into 10,199 and expressing the result as a percent is 0.02%. While Qwest would like everyone to believe that the completion of the performance measurement audit answers forever the question of whether Qwest accurately report performance results, Qwest's calculation of the PO-1C-1 result for March of 2001 demonstrates the answer is no.

PO-2 Electronic Flow Through

Electronic flow-through of an order occurs when an order is submitted by a customer service representative and accepted into the ILEC's service order processor without the need for any manual intervention on the part of the ILEC. Generally bad things can happen when an order is subjected to human intervention. Order information can be mistyped or not entered at all. ILEC representatives can improperly reject a CLEC order. In addition, a need for manual intervention can severely restrict the number of CLEC orders that an ILEC can process in a day.

Qwest's rate of order flow-through is very poor. Less than 54% of all LSRs submitted for resale orders via the IMA-GUI interface in the last twelve months flowed through (PO-2A-1). (See Ex. 1, p. 27). Less than 66% of all LSRs submitted for resale orders via the EDI interface during the last twelve months flowed through (PO-2A-2).

The flow-through results for unbundled loop orders in the last eleven months of reported data is much worse. For unbundled loop orders submitted via the IMA-GUI interface, the flow through rate over the last eleven months is less than 6% (PO-2A-1). (See Ex. 1, p. 29). For unbundled loop orders submitted via the EDI interface, the flow through rate has been less than 5% in eight of the last eleven months (PO-2A-2). The total flow through rate for unbundled loop orders submitted through the EDI interface over the last eleven months is less than 8%. CLECs will never be able to count on Qwest accurately processing unbundled loop orders in any significant volumes with Qwest's extensive reliance on manual processing.

Qwest also has difficulties processing local number portability ("LNP") orders. In the last eleven months, Qwest's performance for LNP flow through for orders submitted via the IMA-GUI interface never exceeded 62% (PO-2A-1). (See Ex. 1, p.

31). The average rate over the last eleven months for LNP orders submitted through IMA-GUI is less than 52%. For LNP orders submitted via the EDI interface, the flow through rate never exceeded 21% (PO-2A-2). The average rate over the last eleven months for LNP orders submitted through the EDI interface is less than 8%. Human error can be predicted with reliability when thousands of LNP orders in any given month are subjected to manual processing.

PO-8A Jeopardy Notice Interval (Average Days) Non-Designed Services and Unbundled Loops

As an initial matter, the statistical results for the PO-8A results for non-designed services look quite suspect. (See Ex. 1, p. 49) The "Mod Z Scr" results for Aug-00 through Dec-00 show a value of 3.72 in four of the five months. ¹⁰ It would be highly unlikely for the exact same modified Z-score to appear in four of the five months. That could point to an error in Qwest's method of calculating the modified Z-score or the standard deviation for the Qwest results. The Qwest result for the month of Jul-01 also looks suspect. In the twelve months of reported data, Qwest's results for PO-8A for non-designed services show between 1,200 to 3,400 jeopardy notices sent in a month. The average jeopardy notice interval for those notices is between 3.3 and 5.7 days. In Jul-01, the Qwest average jeopardy notice interval jumps to 11.09 days. This result is unanticipated for two reasons. The first reason is that what appeared to be a relatively stable process that produces thousands of jeopardy notices per month between three and

¹⁰ The modified Z score is a statistical measure of how far apart are the CLEC and Qwest retail results. One modified Z-score calculation requires values for the CLEC result, the Qwest retail result, the CLEC denominator, the Qwest retail denominator and the Qwest retail standard deviation. The range of possible modified Z-scores that can be obtained from the modified Z-test is infinite. To have five different numbers (the CLEC result, the Qwest retail result, the CLEC denominator, the Qwest retail denominator and the Qwest retail standard deviation) used in four separate calculations produce, to two decimal places, exactly the same modified Z-scores out of the infinite number of possibilities is quite unlikely.

five days, suddenly jumps up to eleven days. The second reason is that non-designed services generally have standard intervals of plus or minus five days. For Qwest to report that it was providing thousands of jeopardy notices in an average of eleven days prior to the due date for orders that generally have standard intervals of about five days would be quite unexpected. AT&T believes that the more likely explanation is that Qwest has again made an error in how it calculated its performance results.

Qwest's performance results for providing jeopardy notices further show that Qwest systematically provides jeopardy notices earlier to its retail customers than it does for CLEC orders. With jeopardy notices, the earlier Qwest provides them, the more valuable they are. Early notice of a jeopardy allows new arrangements to be made with the customer. For the OP-8A measurement, higher results are better.

During the last twelve months of reported data for non-designed services, Qwest provided earlier notice of order jeopardy to its retail customers as compared to CLEC customers in eleven of the twelve months of reported data. In five of those months, the difference was so great that it can be considered to be statistically significant. For unbundled loops in ten of the last twelve months of reported data, Qwest provided earlier notice of order jeopardy to its customers as compared to CLEC orders. (See Ex. 1, p. 5) In two of those months the difference would be considered statistically significant.

What should not be overlooked in the analysis of the results for this measure is the number of months that the Qwest performance to CLECs was inferior to the Qwest performance to its own customers. A general assumption that is used in statistical testing for results analysis is that there is no difference between the processes that Qwest uses for

CLEC activities and retail activities. With that assumption is mind, the statistical test essentially asks and answers the question of whether the difference between the CLEC and retail results is large enough that the assumption of no difference between the processes that Qwest uses for CLEC and retail performance is correct. While individual monthly results may show Qwest performance to CLECs was inferior to that provided to Qwest retail customers, the statistical test for that one month may show the difference was not large enough to rule out random variation. In essence, any difference is attributed to random variation.

If Qwest's performance to CLECs is inferior as compared to Qwest's performance to its retail customers over a period of several months, that is evidence that maybe the processes that Qwest uses for CLEC activities really are inferior to the processes that Qwest uses for its retail customers. While the results of the statistical test for one month may not be able to rule out random variation, when viewed in the context of many months of inferior performance random variation as a source of the difference becomes highly unlikely.

The flipping of a coin can help illustrate this concept. If one were to flip a coin, there is a 50% chance that it will show heads and a 50% chance that it will show tails. There maybe a question of whether the coin is a "fair coin" – that is there an equal probability of heads landing as there is of tails landing and is there anything strange about the coin that would shift those probabilities one way or the other. If the coin in question is flipped and it lands on heads, there would be insufficient evidence with that one flip of the coin to conclude that the coin was "unfair." There was a 50% probability of it landing on heads and it would not be unusual with one flip of the coin to have it land on

heads. If the coin was flipped a second time, it again landed on heads, and the result from the first flip was ignored, there would again be insufficient evidence to conclude the coin was "unfair." If the coin were flipped twelve times, each time the coin landed on heads and only each individual flip of the coin was considered in the question of whether the coin was fair, it would be concluded that there was insufficient evidence to conclude the coin was unfair.

However, if one were to examine the totality of the twelve consecutive flips of the coin landing on heads, one might come to a different conclusion. The probability of a coin landing on heads twelve times in a row is one chance out of 4,096. While there is a very slight probability that a fair coin could really land on heads twelve times in a row, when the evidence is viewed in the totality of the twelve flips the conclusion would more likely point to an unfair coin.

While it is a possibility that random variation could be the source of inferior CLEC results as compared to retail results over consecutive months, the totality of the examination would point to Qwest's processes for CLECs being inferior to those used by Qwest for retail customers. In the PO-8A results, Qwest's performance to CLECs was inferior to Qwest's performance to its retail customers for eleven of the twelve months of reported data. If there truly was no difference between the processes Qwest uses to send jeopardy notices to CLECs and the process it uses to send notices to retail customers, one would expect that as a result of random variation 50% of the time the CLEC results would be better than the retail results and 50% of the time the CLEC results would be worse than the retail results. In the case of non-designed services the CLEC results are

 $^{^{11}}$ The probability of landing on heads with one flip of a coin is 0.5. The probability of landing on heads twelve times in a row is 0.5^{12} .

worse than the retail results in eleven of the twelve months of reported data. If the probability of the CLEC PO-8A results for non-designed services in any given month being worse than the retail results is 50%, then the probability of having CLEC results worse than retail results in eleven of twelve months is 0.32%. Likewise, if the probability of the CLEC PO-8A results for unbundled loops in any given month being worse than the retail results is 50%, then the probability of having CLEC results worse than retail results in ten of twelve months is 1.93%. AT&T believes that the low probability of having the CLEC results worse than the retail results in so many months points more towards a conclusion that Qwest is providing discriminatory treatment to CLECs when it comes to providing jeopardy notices.

PO-9A Timely Jeopardy Notices (Percent) Non-Designed Services, Unbundled Loops and LIS Trunks

Qwest's performance in providing jeopardy notices for those orders in which it eventually missed its committed due date shows that on a relative basis, Qwest's performance to CLECs is inferior to its performance for its retail customers and on an absolute basis, Qwest generally does a very poor job in providing jeopardy notices. It is important for customer satisfaction and from an operational perspective that if Qwest misses its committed due date, that it has already provided a jeopardy notice. If Qwest does not provide a jeopardy notification, the first time that a customer and the CLEC will learn of the problem will be after the due date has been missed. From a customer satisfaction perspective, the customer will be upset that the due date was missed and that there was no notice provided. From an operational perspective, both the CLEC and the

 $^{^{12}}$ The probability of 0.32% was obtained through the use of a standard statistical binomial distribution function table.

customer may have incurred costs or spent effort in preparation for completing work on the due date that Qwest committed to make. While a customer will certainly be unhappy about finding out in advance that the committed due date will need to be changed, a timely jeopardy notice from Qwest will permit both the CLEC and the customer to make other due date and work effort arrangements with a minimum of disruption.

In eleven of the last twelve months of reported data for non-designed services, Qwest provided jeopardy notices to CLECs at a lower rate than Qwest does for its retail customers. (See Ex. 1, p. 49) In seven of those months the difference was great enough to be considered statistically significant. In eight of the last twelve months of reported data for unbundled loops, Qwest's rate at providing jeopardy notices to CLECs was lower than for retail customers. (See Ex. 1, p. 50) In four of those months, the difference was large enough to be considered statistically significant.

Qwest's rate of providing jeopardy notices is also poor on an absolute level. Over the last year, Qwest provided jeopardy notices for only 7% of the non-designed service orders, 20% of the unbundled loop orders and 17% of the LIS trunk orders for which it missed its committed due date.

2. INSTALLATION

<u>OP-3 Installation Commitments Met – No Dispatches and OP-4 Installation Interval</u> (<u>Average Days</u>) No Dispatches – <u>Unbundled Network Element Platform</u>

Installations without the need for a dispatch represent the large majority of UNE-P installations. Qwest's results show that in the last year, less than 5% of the total UNE-P orders required a dispatch for installation.¹³ The performance results for the last three

¹³ The OP-3 denominator for no dispatches over the last 12 months is 581 and the sum of the OP-3 denominators for dispatches within and outside MSA areas is 29. (See Ex. 1, pp. 61 – 63). 29/(581+29) * 100 = 4.75%.

months of reported data show installations for UNE-P orders without dispatch deteriorating and discriminatory Qwest performance. Over the last three months of reported data, Qwest took longer to install CLEC UNE-P orders than for similarly situated retail customers. (See Ex. 1, p. 63) In the last two months, the difference was statistically significant. In addition, over the last four months of reported data, Qwest performance trend is getting worse for CLECs and better for retail customers.

Qwest's OP-3 and OP-4 installation results for UNE-P installations without dispatches demonstrate that Qwest is systematically providing longer commitment dates to CLECs than to similarly situated retail customers. Qwest's OP-3 installation interval results show that Qwest met 100% of its installation commitments to CLECs in the months of Jan-01 and Jun-01. (See Ex. 1, p. 63). Qwest's OP-4 installation interval results also show that Qwest installed UNE-P services for CLECs in those two months in intervals that were longer than for similarly situated retail customers by statistically significant amounts. The only way that Qwest could have met 100% of its commitments while at the same time installing those orders in intervals that are much longer than similarly situated retail customers is if Qwest is systematically providing CLECs with longer commitment dates.

3. MAINTENANCE AND REPAIR

<u>MR-9 Repair Appointments Met – Dispatches Within MSA – Unbundled Network</u> Element Platform

Qwest's results demonstrate that Qwest does not meet its repair commitments for CLEC UNE-P service as frequently as it does for its own retail customers. In eleven of the last twelve months of reported data, the CLEC UNE-P appointments met results were

inferior to results for Qwest's similarly situated customers. (See Ex. 1, p. 66) In the last seven months the difference is statistically significant.

C. CHECKLIST ITEM #4 - ACCESS TO UNBUNDLED LOOPS

1. INSTALLATION

OP-5 New Service Installation without Trouble Reports – Interval Zone One and Two – Non-Loaded (2-Wire) Installation

The OP-5 measurement tracks how well Qwest does in installing services right the first time. Qwest's performance results demonstrate that Qwest has significant problems in installing non-loaded 2-wire unbundled loops right the first time. In all twelve months of reported data, the CLEC rate of trouble free installations was lower than for similarly situated retail customers. (See Ex. 1, p. 78) In every month, this difference was statistically significant. Arizona's poor results for the installation quality of non-loaded, two wire unbundled loops is repeated in the regional results. In the regional results, the rate of trouble free installations of non-loaded, two wire unbundled loops is lower than the retail results by a statistically significant amount in all twelve months of reported data. (See Ex. 2, p. 86.)

2. MAINTENANCE AND REPAIR

MR-7 Repair Repeat Report Rate - Interval Zone One - Non-Loaded 2-Wire Unbundled Loops

Qwest's performance results also demonstrate that in addition to problems with installing 2-wire, non-loaded unbundled loops Qwest also has significant problems repairing them. Qwest's performance results show that Qwest does not repair 2-wire, non-loaded unbundled loops correctly the first time as often as it does for retail

customers. In each of the last twelve months of reported data, the rate of repairs requiring a second repair within thirty days was higher for CLECs than for similarly situated retail customers. (See Ex. 1, p. 79) In seven of those months the difference was statistically significant. Arizona's poor results with Qwest's repair quality of non-loaded, two wire unbundled loops are also seen in the regional results. In the regional results, the repair repeat report rate for non-loaded, two wire unbundled loops is lower than the retail results by a statistically significant amount in eleven of the twelve months of reported data. (See Ex. 2, p. 88.)

MR-8 Trouble Rate Interval Zone One and Two – Non-loaded, two wire Unbundled Loops.

Qwest's performance results show that CLECs experienced more troubles on non-loaded, two wire unbundled loops than similarly situated retail customers by a statistically significant amount in each of the last twelve months of reported data. (See Ex. 1, p. 81). Over the entire twelve months of reported data the CLEC trouble rate for non-loaded, two wire unbundled loops was over 8 times as high as the retail trouble rate. (Clearly, Qwest is not maintaining CLEC non-loaded, two wire unbundled loops with the same attention as it does for its own retail customers. Arizona's poor results with Qwest's maintenance of non-loaded, two wire unbundled loops are also seen in the regional results. In the regional results, the trouble rate for non-loaded, two wire unbundled loops is higher than the retail results by a statistically significant amount in all twelve months of reported data. (See Ex. 2, p. 90.)

 $^{^{14}}$ The trouble rate for CLECs over the twelve-month period was 2.12% and the retail trouble rate during the same period was 0.26%.

MR-6 Mean Time to Restore – Interval Zone One - ISDN Capable Unbundled Loops

Qwest's discriminatory performance in repairing ISDN capable unbundled loops installed for CLECs is confirmed in the mean time to restore results. Qwest took longer to repair ISDN capable unbundled loops for CLEC customers than for similarly situated retail customers in each of the last twelve months. In eight of those months, the difference was statistically significant. (See Ex. 1, p. 95). The probability of the inferior Qwest performance to CLECs being attributed to random variation is 0.02%.

MR-7 Repair Repeat Rate - Interval Zone One - ISDN Capable Unbundled Loop.

Qwest does not repair ISDN capable unbundled loops correctly the first time as often as it does for retail customers. In each of the last twelve months the rate of repairs requiring a second repair within thirty days was higher for CLECs than for similarly situated retail customers. In nine of those months the difference was statistically significant. (See Ex. 1, p. 95).

MR-5 All Troubles Cleared Within 4 Hours (Percent) – Interval Zone One – DS1 Capable Unbundled Loop

In Arizona there are presently very low volumes of DS1 capable unbundled loops in service. As a result, there is very little maintenance and repair data for DS1 Capable Unbundled Loops. Based upon Qwest's regional results, once the DS1 unbundled loop volumes do grow in Arizona, discriminatory repair performance should be expected. In all twelve months of reported data, Qwest's regional performance to CLECs for repairing DS-1 capable loops within four hours was worse than for Qwest's retail customers by a statistically significant amount. (See Ex. 2, p. 101)

MR-6 Mean Time to Restore - Interval Zone One - DS1 Capable Unbundled Loop

Given its poor regional results performance for DS1 repairs within four hours, it should not be surprising that Qwest also provides discriminatory performance to CLECs for the mean time to restore DS1 unbundled loops. In all twelve months of reported data, Qwest's regional performance to CLECs for repairing DS-1 capable loops was worse than for Qwest's retail customers by a statistically significant amount. (See Ex. 2, p. 101)

MR-8 Trouble Rate - Interval Zone One and Two - DS1 Capable Unbundled Loop

Qwest's problems with maintaining and repairing CLEC DS1 capable unbundled loops can also be seen in the regional results for the MR-8 measurement. In eight of the last twelve months of reported regional results, the trouble rate for CLEC DS1 capable unbundled loops was higher by a statistically significant amount than for similarly situated Qwest retail customers. (See Ex. 2, p. 102)

D. CHECKLIST ITEM #5 - UNBUNDLED TRANSPORT

1. INSTALLATION

OP-15A Interval For Pending Orders Delayed Past Due Date - DS1 Level Installation

While the activity of DS1 level UDIT circuits in Arizona has been quite low, the regional results show that Qwest has a serious held order problem with UDIT DS1 circuits. In nine of the last twelve months the number of UDIT DS1 orders late and pending at the end of the month exceeded the total number of UDIT DS1 orders completed in the month. (See Ex. 2, p. 137) In Apr-01 there were 106 late and pending UDIT DS1 orders at the end of the month but only 41 UDIT DS1 orders completed in that month.

In Jun-01 there were 67 orders for UDIT DS1 late and pending at the end of the month throughout the region. Those 67 orders were late by an average of 125.46 days. In Jul-01 the number of late and pending orders at the end of the month dropped to 2 for the entire region. Viewed narrowly, one might conclude that in Jul-01 Qwest finally completed those late and pending orders. However, the OP-3 results do not support that conclusion. In Jul-01 there were only 13 UDIT DS1 orders completed in the entire region and those 13 orders had an OP-4 average installation interval of 6.69 days.

It would appear from the available evidence that rather than completing the late and pending UDIT DS1 orders, Qwest has begun a program of rejecting those orders.¹⁵ Rejecting rather than completing or carrying as a pending order those late and pending orders produces the unearned result of making Qwest's OP-3, OP-4, OP-6 and OP-15 look better than they really are. It also creates operational problems for the CLEC.

2. MAINTENANCE AND REPAIR

MR-5 All Troubles Cleared Within 4 Hours (Percent) – Interval Zone One – UDIT Above DS1

While the Arizona volumes of UDIT Above DS1 circuits in service is quite low, the regional results show that Qwest repairs CLEC UDIT Above DS1 circuits within four hours at a lower rate than for similarly situated retail customers. The regional results show that in eleven of the last twelve months the rate of troubles cleared within four hours was worse for CLECs than it was for similarly situated retail customers. (See Ex. 2, p. 145) In seven of those months, the results were worse by a statistically significant amount.

¹⁵ Qwest has admitted that for loop orders, it is removing held orders from its results calculations by rejecting the order rather than continuing to track the delays. Rejection of the order insinuates that the CLEC, rather than Qwest, is to blame.

MR-8 Trouble Rate (Percent) Interval Zone One and Two - UDIT Above DS1

The Arizona trouble rate results for UDIT Above DS1 circuits show that Qwest maintains CLEC circuits at a level of performance worse than for its similarly situated retail customers. In eleven of the twelve months of reported results, the CLEC trouble rate was higher than the retail trouble rate. (See Ex. 1, p. 126) In seven of those months, the rate was worse by a statistically significant amount.

The regional results confirm Qwest's problems in maintaining CLEC UDIT

Above DS1 circuits. The regional results show that in eleven of the last twelve months
the trouble rate was higher for CLECs than it was for similarly situated retail customers.

(See Ex. 2, p. 146) In ten of those months, the results were worse by a statistically significant amount.

E. CHECKLIST ITEM #14 RESALE

1. INSTALLATION

OP-3 Installation Commitments Met and OP-4 Installation Interval (Average Days) – Residence – No Dispatches

Installation of residence resale service completed predominately without dispatch. In Arizona, Qwest's performance for the time to install residential service is discriminatory and getting worse. The last three months of reported data show the intervals steadily getting longer. (See Ex. 1, p. 140) The same three months of results also show that Qwest's performance is getting even more discriminatory. The modified z-score has increased in each of the last three months. Over the last eight months, the average installation interval has steadily gotten longer.

Qwest's OP-3 and OP-4 installation results for residential installations without dispatch demonstrate that Qwest is systematically providing longer commitment dates to CLECs than to similarly situated retail. Qwest's OP-3 installation interval results show that Qwest met nearly 100% of its installation commitments in the twelve months of reported data. (See Ex. 1, p. 140). Qwest's OP-4 installation interval results also show that Qwest installed residential resale services in the last three months in intervals that were longer than for similarly situated retail customers by statistically significant amounts. (See Ex. 1, p. 140). The only way that Qwest could have met nearly 100% of its commitments to CLECs, while at the same time installing those orders in intervals that are much longer than similarly situated retail customers, is if Qwest is systematically providing CLECs with longer commitment dates.

OP-3 Installation Commitments Met (Percent) - Business - Dispatch Within MSA

Qwest's recent performance installing business resale services that require a dispatch demonstrates that Qwest is providing discriminatory performance to CLECs. In five of the last seven months of reported data, Qwest's success in meeting its commitments for installing business resale services has been worse by a statistically significant amount when compared to Qwest's retail performance. (See Ex. 1, p. 147)

OP-3 Installation Commitments Met (Percent) - Business - No Dispatches

Qwest's performance results demonstrate that Qwest also has problems in installing business resale services that do not require a dispatch. During the last twelve months of reported data, Qwest's performance to CLECs was inferior in nine months.

(See Ex. 1, p. 149) In seven of those months, Qwest's performance was inferior by a statistically significant amount.

2. MAINTENANCE AND REPAIR

MR-7 Repair Repeat Report Rate (Percent) - No Dispatches - Business Resale

Qwest's performance in repairing a service right the first time demonstrates that in all twelve months of reported data, Qwest's performance to CLECs was worse than its performance to itself. (See Ex. 1, p. 154) As previously discussed, the probability of Qwest performing worse for CLECs than for its own retail customers in twelve consecutive months, if there truly was no difference between the CLEC and retail the processes, is 0.02%. The more likely explanation is that Qwest does not take as much care in repairing CLEC business resold services as it does for its own retail customers.

MR-8 Trouble Rate (Percent) – Business Resale Services

Qwest's discriminatory repair practices for resale business services are also evident in the trouble report results. In every month of reported data, the trouble rate for resale business services was higher than the rate for retail business services by a statistically significant amount. (See Ex. 1, p. 154)

CONCLUSION

Qwest's own data for checklist items 1, 2, 4, 5, and 14 shows that Qwest is failing, in significant and numerous ways, to satisfy its legal obligations. Qwest's failures are affecting competition in this state, and putting CLECs at a noticeable disadvantage due to Qwest's discriminatory treatment of CLECs and their customers. Because commercial activity is the best evidence of an ILEC's ability to perform, the Commission must find that Qwest currently fails to meet its Section 271 obligations on the above checklist items.

VERIFICATION OF JOHN F. FINNEGAN

I, John F. Finnegan, being duly sworn, state that I am a Senior Policy Witness for AT&T Communications of the Mountain States, Inc. By this affidavit, I verify that the factual assertions in the Affidavit of John F. Finnegan Regarding Qwest's Performance Measurement Results are true and correct statements to the best of my knowledge and expertise.

FURTHER AFFIANT SAYETH NOT.

Dated this 31st day of October 2001.

∖ John F. Finnegan

STATE OF COLORADO

) ss

CITY AND COUNTY OF DENVER

SUBSCRIBED AND SWORN TO before me this 31st day of October, 2001 by John F. Finnegan, who certifies that the foregoing is true and correct to best of his knowledge and belief.

Witness my hand and official seal.

Motary Public

My commission expires:

August 5, 2002

CERTIFICATE OF SERVICE

I certify that the original and 10 copies of the <u>public version</u> of the Affidavit of Stephen L. Kail Regarding Analysis of Qwest Performance Data and the Affidavit of John F. Finnegan Regarding Analysis of Qwest Performance Results in Docket No. T-00000A-97-0238 were sent by overnight delivery on November 1, 2001 to:

Arizona Corporation Commission Docket Control – Utilities Division 1200 West Washington Street Phoenix, AZ 85007

and a true and correct copy was sent by overnight delivery on November 1, 2001 to:

Maureen Scott Legal Division Arizona Corporation Commission 1200 West Washington Street Phoenix, AZ 85007

Deborah Scott Director - Utilities Division Arizona Corporation Commission 1200 West Washington Street Phoenix, AZ 85007

Jane Rodda Administrative Law Judge Arizona Corporation Commission 400 West Congress Tucson, AZ 85701-1347 Mark A. DiNunzio Arizona Corporation Commission 1200 West Washington Street Phoenix, AZ 85007

Christopher Kempley Arizona Corporation Commission Legal Division 1200 West Washington Street Phoenix, AZ 85007

and a true and correct copy was sent by U. S. Mail on November 1, 2001 to:

Thomas F. Dixon WorldCom, Inc. 707 – 17th Street, #3900 Denver, CO 80202

Douglas Hsiao Rhythms Links, Inc. 9100 E. Mineral Circle Englewood, CO 80112 Terry Tan WorldCom, Inc. 201 Spear Street, 9th Floor San Francisco, CA 94015

Bradley Carroll Cox Arizona Telcom, L.L.C. 20401 North 29th Avenue Phoenix, AZ 85027-3148 Michael M. Grant Gallagher and Kennedy 2575 East Camelback Road Phoenix, AZ 85016-9225

Gena Doyscher Global Crossing Local Services, Inc. 1221 Nicollet Mall, Suite 300 Minneapolis MN 55403

Traci Kirkpatrick Davis Wright Tremaine LLP 1300 S.W. Fifth Avenue Portland, OR 97201

Michael W. Patten Roshka Heyman & DeWulf, PLC 400 North Fifth Street, Suite 1000 Phoenix, AZ 85004-3906

Joyce Hundley United States Dept. of Justice Antitrust Division 1401 H Street NW, Suite 8000 Washington, DC 20530

Daniel Pozefsky Residential Utility Consumer Office 2828 North Central Ave., #1200 Phoenix, AZ 85004

Mark N. Rogers Excell Agent Services, L.L.C. 2175 W. 14th Street Tempe, AZ 85281

Mark P. Trinchero Davis Wright Tremaine 1300 SW Fifth Ave., Suite 2300 Portland OR 97201-5682 Penny Bewick New Edge Networks 3000 Columbia House Blvd., Suite 106 Vancouver, WA 98661

Thomas H. Campbell Lewis & Roca LLP 40 N. Central Avenue Phoenix, AZ 85004

Karen L. Clauson Eschelon Telecom, Inc. 730 2nd Avenue South, Suite 1200 Minneapolis, MN 55402

Joan S. Burke Osborn Maledon, P.A. 2929 N. Central Avenue, 21st Floor Phoenix, AZ 85067-6379

Eric S. Heath Sprint Communications Company L.P. 100 Spear Street, Suite 930 San Francisco, CA 94105

Charles Kallenbach American Communications Services, Inc. 131 National Business Parkway Annapolis Junction, MD 20701

Jeffrey W. Crockett Snell & Wilmer, LLP One Arizona Center Phoenix, AZ 85004-0001

Todd C. Wiley Gallagher & Kennedy, P.A. 2575 East Camelback Road Phoenix, AZ 85016-9225 Water Comments

Michael B. Hazzard Kelley, Drye & Warren, LLP 1200 19th Street, NW, Fifth Floor Washington, DC 20036

Daniel Waggoner Davis Wright Tremaine 2600 Century Square 1501 Fourth Avenue Seattle, WA 98101-1688

Timothy Berg Fennemore Craig, P.C. 3003 North Central Ave., #2600 Phoenix, AZ 85012

Raymond S. Heyman Randall H. Warner Roshka Heyman & DeWulf Two Arizona Center 400 N. Fifth Street, Suite 1000 Phoenix, AZ 85004

Diane Bacon, Legislative Director Communications Workers of America Arizona State Council District 7 AFL-CIO, CLC 5818 N. 7th Street, Suite 206 Phoenix, AZ 85014-5811

Andrea P. Harris Senior Manager, Regulatory Allegiance Telecom, Inc. 2101 Webster, Suite 1580 Oakland, CA 94612

K. Megan Doberneck Covad Communications Company 7901 Lowry Blvd. Denver, CO 80230 Andrew Crain

Qwest Corporation

1801 California Street, Suite 4900

Denver, CO 80202

Janet Livengood Regional Vice President Z-Tel Communications, Inc. 601 S. Harbour Island Blvd., Suite 220 Tampa, FL 33602

Charles W. Steese Qwest Corporation 1801 California Street, Suite 4900 Denver, CO 80202

Bill Haas Richard Lipman McLeodUSA Telecommunications Services, Inc. 6400 C Street SW Cedar Rapids, IA 54206-3177

Mark Dioguardi Tiffany and Bosco, P.A. 500 Dial Tower 1850 North Central Ave. Phoenix, AZ 85004

Brian Thomas
Vice President – Regulatory
Time Warner Telecom, Inc.
520 S.W. 6th Avenue, Suite 300
Portland, OR 97204

Lisa Crowley Regional Counsel Covad Communications Company 7901 Lowry Boulevard Denver, Colorado 80230